
# United States
# Environmental Protection Agency

# FISCAL YEAR 2019

## Justification of Appropriation Estimates for the Committee on Appropriations

EPA-190-R-18-001

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www.epa.gov/ocfo

## EPA's Mission

The mission of the Environmental Protection Agency (EPA) is to protect human health and the environment. This mission resonates with all Americans; we can all agree that we want our future generations to inherit a cleaner, healthier environment that supports a thriving economy. In carrying out its mission, the EPA works to ensure that all Americans are protected from exposure to hazardous environmental risks where they live, learn, work, and enjoy their lives. The Agency guides national efforts to reduce environmental risks, based upon on-going research and scientific analysis.

EPA's FY 2019 Budget maintains core environmental protection with respect to statutory and regulatory obligations. This budget provides the direction and resources to return the EPA to its core mission of protecting human health and the environment. This can be accomplished by engaging with state, local, and tribal partners to create and implement sensible regulations that also work to enhance economic growth.

This strategy will be realized through the creation of three, new overarching strategic goals that guide EPA's approach to protect human health and the environment:

- **Goal 1 – Core Mission**: Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.
- **Goal 2 – Cooperative Federalism**: Rebalance the power between Washington and the states to create tangible environmental results for the American people.
- **Goal 3 – Rule of Law and Process**: Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law.

The EPA works to ensure our future generations will inherit a better and healthier environment. Environmental stewardship while growing our economy is essential to the American way of life and key to economic success and competitiveness. Regulation and policy will incorporate robust input from the public through formal and informal mechanisms to seek full understanding of the impacts of proposed policy on public health, the environment, the economy, jobs, families, and our communities.

The EPA is proud to be a good steward of taxpayer resources and to efficiently deliver environmental protection. To learn more about how the Agency accomplishes its mission, including information on the organizational structure and regional offices, please visit: http://www.epa.gov/aboutepa/.

## FY 2019 Annual Performance Plan

The EPA's FY 2019 Annual Performance Plan and Budget[1] of $6.146 billion represents a $2.58 billion, or 23.2% reduction from the Agency's FY 2018 Annualized Continuing Resolution (ACR) level. This resource level and the Agency requested 12,250.3 FTE will enable EPA to support our highest priorities and fulfill our critical mission for the American people.

[1] The Budget includes the addendum to the President's FY 2019 Budget to account for the Bipartisan Budget Act of 2018.

A major component of our FY 2019 budget request is funding for drinking water and clean water infrastructure as well as for Brownfields and Superfund projects. Resources also are focused on efforts to improve and protect air quality and to ensure the safety of chemicals. This budget ensures that federal funding supports the highest priority national work. With the understanding that environmental protection is a shared responsibility, funds are provided to our state and tribal partners through programs such as the Multipurpose Grants to implement core mission work in a flexible manner. This budget also provides essential resources to equip EPA in delivering vital emergency response services in environmental disasters.

The FY 2019 Budget, along with the FY 2018-2022 Strategic Plan and the Agency Reform Plan, highlight actions that will enable EPA to reduce costs and more effectively utilize limited resources. The Agency will work across all of our programs to unite varied interests and stakeholders to focus attention and leverage federal, state, local, and non-governmental resources in a coordinated effort to address the nation's greatest environmental challenges.

## FY 2018-2019 Agency Priority Goals

The budget highlights EPA's six FY 2018-2019 Agency Priority Goals[2] (APGs) that advance EPA priorities and the Agency's FY 2018-2022 Strategic Plan.

**Improve air quality by implementing pollution control measures to reduce the number of non-attainment areas.** By September 30, 2019, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 138 from a baseline of 166.

**Empower communities to leverage EPA water infrastructure investments.** By September 30, 2019, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act).

**Accelerate the pace of cleanups and return sites to beneficial use in their communities.** By September 30, 2019, EPA will make an additional 102 Superfund sites and 1,368 Brownfields sites ready for anticipated use (RAU).

**Meet new statutory requirements to improve the safety of chemicals in commerce.** By September 30, 2019, EPA will complete in accordance with statutory timelines (excluding statutorily-allowable extensions): 100% of required EPA-initiated Toxic Substances Control Act (TSCA) risk evaluations for existing chemicals; 100% of required TSCA risk management actions for existing chemicals; and 80% of TSCA pre-manufacture notice final determinations.

**Increase environmental law compliance rate.** Through September 30, 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits to 21% from a baseline of 24%.

[2] Agency Priority Goals reflect the top near-term Agency priorities that advance progress towards the three overarching Strategic Plan Goals.

**Accelerate permitting-related decisions.** By September 30, 2019, EPA will reduce by 50% the number of permitting-related decisions that exceed six months.

## FY 2019 Funding Priorities

### Infrastructure

The infrastructure of the Nation is not limited to roads and bridges. The infrastructure needs of our communities are broader and include making improvements to drinking water and waste water infrastructure as well as cleaning up contaminated land. In FY 2019, EPA will work in a focused manner to make infrastructure and public health protection investments in communities, by working with and through our state and tribal partners.

A priority for the Agency is modernizing the outdated water infrastructure on which the American public depends. This budget supports the President's commitment to infrastructure repair and replacement and would allow states, municipalities, and private entities to finance high priority infrastructure investments. The FY 2019 budget includes $2.3 billion for the State Revolving Funds (SRF) and $20 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program.

Clean and safe drinking water is critical to the health of communities. While most small systems consistently provide safe and reliable drinking water, many small systems face challenges with aging infrastructure, increasing costs and decreasing rates bases, making the drinking water SRF an important source of funding for these communities. This SRF funding also supports efforts across the country to eradicate lead pipes that may leach into the nation's drinking water supply. The budget maintains funding for the drinking water SRF to support this priority to reduce lead exposure, and ensure small and disadvantaged communities have access to clean and safe water.

With $20 million in FY 2019 WIFIA appropriations, EPA could potentially provide up to $2 billion in credit assistance, which, when combined with other funding sources, could spur up to an estimated $4 billion in total infrastructure investment.[3] The WIFIA program is designed to offer credit assistance with flexible terms in order to attract private participation, encourage new revenue streams for infrastructure investment, and allow public agencies to get more projects done. This makes the WIFIA program credit assistance a powerful new tool to help address a variety of existing and new water infrastructure needs.

Given that EPA's infrastructure investments are catalysts for economic growth and environmental protection, the Agency will support private and public investment in economic revitalization that improve environmental outcomes across the country. EPA will identify opportunities to link infrastructure and community assistance program resources to spur similar, non-Agency investments with the goal of enhancing the collective impact those resource have in communities. Through the combined work of the SRFs and WIFIA, EPA will ensure that it is serving disadvantaged communities, leveraging private investment to improve the economy, and protecting human health and the environment.

[3] This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

## Improving Air Quality

In FY 2019, the EPA will perform activities in support of the National Ambient Air Quality Standards (NAAQS) and implementation of stationary source regulations to support state, local, and tribal air quality programs. The Agency will continue its Clean Air Act (CAA) mandated responsibilities to administer the NAAQS and will provide a variety of technical assistance, training, and information to support state clean air plans. The EPA will continue to prioritize statutorily mandated responsibilities and court-ordered actions. A focus will be placed on states achieving attainment, looking for improved processes for (State Implementation Plans) SIPS and implementation options. In addition, the EPA will continue to conduct risk assessments, to determine whether the Maximum Achievable Control Technology (MACT) rules appropriately protect public health.

In FY 2019, the Federal Vehicle and Fuels Standards and Certification program will focus its efforts on certification decisions. The Agency will perform its compliance oversight functions on priority matters, where there is evidence to suggest noncompliance, and conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars.

The Budget includes a proposal to authorize the EPA to establish user fees for entities that participate in the ENERGY STAR program. By administering the ENERGY STAR program through the collection of user fees, the EPA would continue to provide a trusted resource for consumers and businesses who want to purchase products that save them money and help protect the environment.

Air monitoring, which provides information to states used to develop clean air plans, for research, and for the public, will continue to be a focus of the Agency. In FY 2019, the EPA will provide grants to state, local, and tribal air pollution control agencies to manage and implement their air quality programs. We will work with our state and tribal partners to rapidly approve their implementation plans for attaining air quality standards to reduce contaminants that cause or exacerbate health issues.
This budget supports implementation of Executive Order 13783, Promoting Energy Independence and Economic Growth, which directs all agencies to identify, and propose measures to suspend, revise or rescind regulatory barriers that impede progress towards energy independence. EPA will continue to take appropriate deregulatory actions and work to speed up the environmental permitting process to advance this effort.

## Clean and Safe Water

The EPA will continue to provide scientific water quality criteria information, review and approve state water quality standards, and review and approve state lists of impaired waters. In FY 2019, the Agency will continue to work with states and other partners on Total Maximum Daily Loads (TMDLs) as required by the Clean Water Act, as well as on other waterbody restoration plans for listed impaired waterbodies. The EPA also will continue to implement and support core water quality programs that control point-source discharges through permitting and pre-treatment programs.

The EPA will continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure efforts as source water protection can reduce the need for additional drinking water treatment and associated costs. In FY 2019, the Agency will continue to emphasize efforts on small and rural community water systems. EPA also will coordinate and support protection of the nation's critical water infrastructure from terrorist threats and all-hazard events.

**Revitalizing Land**

The cleanup and reuse of contaminated lands often can play an important role in economically revitalizing a community. The EPA's cleanup programs, including Superfund and Brownfields, protect human health and the environment and also return sites to productive use, which is important to the economic well-being of communities. Working collaboratively with partners across the country, the EPA engages with communities in site cleanup decisions, fosters employment opportunities in communities during and after remedy construction, promotes the redevelopment of blighted areas, and protects human health and the environment.

The FY 2019 budget includes $864.7 million to fund EPA's cleanup programs. In FY 2019, particular emphasis will be placed on the Agency's top priority list of Superfund sites.[4] These sites are targeted for immediate and intense action to accelerate clean-up and promote site reuse, while addressing risks to human health and the environment. The Agency will accelerate cleanup by re-prioritizing some resources to focus on remedial actions, construction completions, ready-for-reuse determinations, and National Priorities List (NPL) site deletions. Further, the Agency will focus efforts to clean up and propel development at Superfund sites that offer the greatest expected redevelopment and commercial potential, as outlined in the recently released Superfund Redevelopment Focus List[5], and will promote additional private investment in cleanup activities as recommended by the Superfund Task Force[6].

The EPA also will invest in communities through Brownfields grants so communities can realize their own visions for environmental health, economic growth, and job creation. In FY 2017, grants awarded by the Brownfields program have led to over 69,200 acres of idle land made ready for productive use and over 129,240 jobs and $24.7 billion leveraged.[7] In addition, EPA will continue to work with industry to prevent new releases from occurring through the accident prevention training, regulation, and inspections. The FY 2019 Budget includes a proposal that would authorize EPA to collect and use fees to provide on-site compliance assistance to oil and chemical facilities seeking to use this service.

**Ensuring the Safety of Chemicals**

In FY 2019 resources will support the Agency's significant continuing and new responsibilities under the Toxic Substances Control Act (TSCA) for ensuring that new and existing chemicals are

[4] https://www.epa.gov/superfund/superfund-sites-targeted-immediate-intense-action
[5] https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-focus-list
[6] https://www.epa.gov/sites/production/files/2017-07/documents/superfund_task_force_report.pdf
[7] The EPA's ACRES database (https://cfext.epa.gov/acres/)

evaluated in a timely manner and that any unreasonable risks are addressed. The EPA will work aggressively to complete the 10 chemical risk evaluations initiated in December 2016, continue prioritization efforts to identify future chemicals for evaluation and evaluate new chemicals before they are allowed to commercialize. In addition to fees, $58.6 million is requested in FY 2019 for the TSCA Chemical Risk Review and Reduction program to support this high priority work. EPA will focus on meeting its statutory requirements and mandatory deadlines of TSCA and ensuring our reviews are efficient, effective, and transparent to stakeholders. New chemicals will be evaluated and decisions will be based on best available science and the weight of evidence. For chemicals in commerce, the EPA will maintain an ambitious schedule for initiating and completing chemical risk evaluations and, where risks are identified, for initiating and completing regulatory actions to address those risks. The EPA's toxics program will maintain its 'zero tolerance' goal for preventing the introduction of unsafe new chemicals into commerce. The EPA also will implement the new mandates related to determinations on claims for confidentiality for chemical identities.

In FY 2019, the Agency will continue implementing TSCA activities not amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. The Agency also will provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts, as well as provide for the operation and maintenance of the online Federal Lead-Based Paint program database (FLPP) that supports the processing of applications for training providers, firms and individuals.

Identifying, assessing, and reducing the risks presented by the pesticides on which our society and economy rely is integral to ensuring environmental and human safety. In FY 2019 the EPA will invest resources to improve the compliance of pesticide registrations with the Endangered Species Act. A portion of the funding also will ensure that pesticides are correctly registered and applied in a manner that protects water quality. Chemical and biological pesticides help meet national and global demands for food. They provide effective pest control for homes, schools, gardens, highways, utility lines, hospitals, and drinking water treatment facilities, while also controlling vectors of disease. EPA ensures pesticides available in the U.S. are safe when used as directed. In addition, the Agency is increasing the focus on pollinator health, working with other federal partners, states, and private stakeholder groups to stem pollinator declines and increase pollinator habitat.

**Establishing New Fees**

EPA is proposing several new fees in FY 2019 to better align appropriated resources to the Agency's core mission, provide dedicated funding sources for specific activities and to better align program costs with beneficiaries. To increase compliance in industry, EPA proposes establishing two new voluntary user fees. These fees will enable EPA to provide compliance assistance services to both Risk Management Plan facilities, and Facility Response Plan and Spill Prevention Control and Countermeasure facilities. EPA also is proposing to establish Energy Star as a fee-funded program in FY 2019 to ensure the important work of the program continues. In addition, EPA will continue to work with OMB and other Agencies to review potential areas where fee-funding may be an appropriate mechanism to reduce the burden on taxpayers.

## EPA Reform Plan

The Budget includes EPA's Reform Plan to implement the goals of Executive Order 13781: *Comprehensive Plan for Reorganizing the Executive Branch*. The plan includes a series of projects focused on improving how we provide services and engage our customers. Projects include streamlining EPA's permit review process, deploying a Lean Management System, and reducing the reporting burden on the regulated community. More information is available in the Congressional Justification appendix.

## Eliminated Programs

Programs and activities eliminated in the FY 2019 Budget total $598.5 million compared to FY 2018 Annualized CR levels. Details are found in [https://www.epa.gov/planandbudget/fy2019]. The Administration is committed to creating a leaner, more accountable, less intrusive, and more effective Government.

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## APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget |
|---|---|---|---|
| **Science & Technology** | $723,576.4 | $708,975.0 | $448,965.0 |
| **Environmental Program & Management** | $2,639,159.5 | $2,602,009.0 | $1,738,852.0 |
| **Inspector General** | $41,053.7 | $41,207.0 | $37,475.0 |
| **Building and Facilities** | $32,184.7 | $34,233.0 | $39,553.0 |
| **Inland Oil Spill Programs** | $17,940.1 | $18,085.0 | $15,673.0 |
| ***IG Transfer*** | $9,156.4 | $8,718.0 | $8,718.0 |
| ***Superfund Program*** | $1,118,294.1 | $1,057,265.0 | $1,062,714.0 |
| ***S&T Transfer*** | $17,248.9 | $15,391.0 | $17,398.0 |
| **Hazardous Substance Superfund** | $1,144,699.4 | $1,081,374.0 | $1,088,830.0 |
| **Leaking Underground Storage Tanks** | $92,143.4 | $91,317.0 | $47,532.0 |
| **State and Tribal Assistance Grants** | $3,557,752.4 | $3,503,209.0 | $2,929,467.0 |
| **Hazardous Waste Electronic Manifest System Fund** | $4,915.4 | $3,156.0 | $0.0 |
| **Water Infrastructure Finance and Innovation Fund** | $3,597.7 | $12,932.0 | $20,000.0 |
| ***SUB-TOTAL, EPA*** | *$8,257,022.7* | *$8,096,497.0* | *$6,366,347.0* |
| **Cancellation of Funds** | $0.0 | -$90,348.0 | -$220,460.0 |
| ***TOTAL, EPA*** | *$8,257,022.7* | *$8,006,149.0* | *$6,145,887.0* |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

## APPROPRIATION SUMMARY

Full-time Equivalents (FTE)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget |
|---|---|---|---|
| **Science & Technology** | 2,137.0 | 2,199.7 | 1,492.4 |
| **Environmental Program & Management** | 9,368.4 | 9,758.2 | 7,331.6 |
| **Inspector General** | 219.0 | 268.0 | 201.4 |
| **Inland Oil Spill Programs** | 92.4 | 98.3 | 75.7 |
| ***IG Transfer*** | 45.8 | 50.1 | 40.6 |
| ***Superfund Program*** | 2,530.2 | 2,541.9 | 2,466.9 |
| ***S&T Transfer*** | 67.4 | 71.6 | 83.1 |
| **Hazardous Substance Superfund** | 2,643.4 | 2,663.6 | 2,590.6 |
| **Leaking Underground Storage Tanks** | 48.5 | 54.1 | 40.7 |
| **State and Tribal Assistance Grants** | 4.9 | 0.0 | 0.0 |
| **Hazardous Waste Electronic Manifest System Fund** | 8.0 | 7.9 | 10.0 |
| **Water Infrastructure Finance and Innovation Fund** | 9.6 | 12.0 | 12.0 |
| **Rereg. & Exped. Proc. Rev Fund** | 83.8 | 145.0 | 221.5 |
| **WCF-Reimbursable** | 142.4 | 201.3 | 211.8 |
| **Pesticide Registration Fund** | 61.3 | 0.0 | 0.0 |
| **Deepwater Horizon Natural Resource Damage Assessment** | 4.0 | 0.0 | 0.0 |
| **TSCA Service Fee Fund** | 0.0 | 0.0 | 62.6 |
| **UIC Injection Well Permit BLM** | 1.7 | 0.0 | 0.0 |
| ***SUB-TOTAL, EPA*** | *14,824.4* | *15,408.1* | *12,250.3* |
| ***TOTAL, EPA*** | *14,824.4* | *15,408.1* | *12,250.3* |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

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## GOAL, APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget |
|---|---|---|---|
| **Core Mission** | $6,041,166.2 | $5,891,427.0 | $4,533,387.0 |
| **Science & Technology** | $175,032.9 | $167,710.0 | $125,901.0 |
| **Environmental Program & Management** | $1,491,381.3 | $1,456,110.0 | $712,825.0 |
| **Inland Oil Spill Programs** | $14,422.5 | $14,311.0 | $12,273.0 |
| **Hazardous Substance Superfund** | $808,488.7 | $747,116.0 | $752,091.0 |
| **Leaking Underground Storage Tanks** | $90,180.6 | $89,040.0 | $45,292.0 |
| **State and Tribal Assistance Grants** | $3,453,147.1 | $3,401,052.0 | $2,865,005.0 |
| **Hazardous Waste Electronic Manifest System Fund** | $4,915.4 | $3,156.0 | $0.0 |
| **Water Infrastructure Finance and Innovation Fund** | $3,597.7 | $12,932.0 | $20,000.0 |
| **Cooperative Federalism** | $317,037.4 | $316,713.0 | $217,148.0 |
| **Environmental Program & Management** | $219,223.2 | $221,789.0 | $158,120.0 |
| **Inland Oil Spill Programs** | $145.2 | $138.0 | $0.0 |
| **Hazardous Substance Superfund** | $2,353.0 | $2,209.0 | $988.0 |
| **State and Tribal Assistance Grants** | $95,316.0 | $92,577.0 | $58,040.0 |
| **Rule of Law and Process** | $1,898,819.1 | $1,888,357.0 | $1,615,812.0 |
| **Science & Technology** | $548,543.5 | $541,265.0 | $323,064.0 |
| **Environmental Program & Management** | $928,555.0 | $924,110.0 | $867,907.0 |
| **Inspector General** | $41,053.7 | $41,207.0 | $37,475.0 |
| **Building and Facilities** | $32,184.7 | $34,233.0 | $39,553.0 |
| **Inland Oil Spill Programs** | $3,372.4 | $3,636.0 | $3,400.0 |
| **Hazardous Substance Superfund** | $333,857.7 | $332,049.0 | $335,751.0 |
| **Leaking Underground Storage Tanks** | $1,962.8 | $2,277.0 | $2,240.0 |
| **State and Tribal Assistance Grants** | $9,289.3 | $9,580.0 | $6,422.0 |
| ***Sub-Total*** | *$8,257,022.7* | *$8,096,497.0* | *$6,366,347.0* |
| **Cancellation of Funds** | $0.0 | -$90,348.0 | -$220,460.0 |
| **TOTAL, EPA** | $8,257,022.7 | $8,006,149.0 | $6,145,887.0 |

## GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget |
|---|---|---|---|
| **Core Mission** | 7,101.9 | 7,200.5 | 5,809.4 |
| **Science & Technology** | 522.3 | 530.6 | 456.9 |
| **Environmental Program & Management** | 4,861.2 | 5,028.0 | 3,622.3 |
| **Inland Oil Spill Programs** | 78.0 | 83.1 | 62.3 |
| **Hazardous Substance Superfund** | 1,426.5 | 1,348.2 | 1,339.2 |
| **Leaking Underground Storage Tanks** | 41.9 | 45.7 | 33.6 |
| **State and Tribal Assistance Grants** | 4.9 | 0.0 | 0.0 |
| **Hazardous Waste Electronic Manifest System Fund** | 8.0 | 7.9 | 10.0 |
| **Water Infrastructure Finance and Innovation Fund** | 9.6 | 12.0 | 12.0 |
| **Rereg. & Exped. Proc. Rev Fund** | 82.6 | 145.0 | 221.5 |
| **Cooperative Federalism** | 1,150.6 | 1,228.1 | 831.0 |
| **Environmental Program & Management** | 1,142.2 | 1,219.1 | 827.8 |
| **Inland Oil Spill Programs** | 0.7 | 0.9 | 0.0 |
| **Hazardous Substance Superfund** | 5.7 | 6.1 | 1.2 |
| **WCF-Reimbursable** | 2.0 | 2.0 | 2.0 |
| **Rule of Law and Process** | 6,572.0 | 6,979.5 | 5,609.9 |
| **Science & Technology** | 1,614.7 | 1,669.1 | 1,035.5 |
| **Environmental Program & Management** | 3,365.1 | 3,511.1 | 2,881.5 |
| **Inspector General** | 219.0 | 268.0 | 201.4 |
| **Inland Oil Spill Programs** | 13.7 | 14.3 | 13.4 |
| **Hazardous Substance Superfund** | 1,211.2 | 1,309.3 | 1,250.2 |
| **Leaking Underground Storage Tanks** | 6.6 | 8.4 | 7.1 |
| **Rereg. & Exped. Proc. Rev Fund** | 1.2 | 0.0 | 0.0 |
| **WCF-Reimbursable** | 140.4 | 199.3 | 209.8 |
| **TOTAL, EPA** | 14,824.5 | 15,408.1 | 12,250.3 |

## Core Mission

Core Mission: Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.

STRATEGIC OBJECTIVES:

- Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.
- Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.
- Provide better leadership and management to properly cleanup contaminated sites to revitalize and return the land back to communities.
- Effectively implement the Toxics Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.

## GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Core Mission** | **$6,041,166.2** | **$5,891,427.0** | **$4,533,387.0** | **-$1,358,040.0** |
| Improve Air Quality | $715,084.9 | $759,177.0 | $409,589.0 | -$349,588.0 |
| Provide Clean and Safe Water | $3,764,751.7 | $3,640,714.0 | $2,866,257.0 | -$774,457.0 |
| Revitalize Land and Prevent Contamination | $1,327,484.0 | $1,258,401.0 | $1,095,896.0 | -$162,505.0 |
| Ensure Safety of Chemicals in the Marketplace | $233,845.6 | $233,135.0 | $161,645.0 | -$71,490.0 |
| Total Authorized Workyears | 7,101.9 | 7,200.5 | 5,809.4 | -1,391.1 |

## Goal 1: Core Mission

**Strategic Goal:** Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.

| Core Mission | FY 2017 Enacted Budget | FY 2018 Annualized CR | FY 2019 President's Budget | Delta FY 2019 - FY 2018 |
|---|---|---|---|---|
| 1.1 Improve Air Quality | $764,367 | $759,177 | $409,589 | ($349,588) |
| 1.2 Provide Clean and Safe Water | $3,662,587 | $3,640,714 | $2,866,257 | ($774,457) |
| 1.3 Revitalize Land and Prevent Contamination | $1,267,005 | $1,258,401 | $1,095,896 | ($162,505) |
| 1.4 Ensure Safety of Chemicals in the Marketplace | $234,727 | $233,135 | $161,645 | ($71,490) |
| **Goal 1 Total** | **$5,928,686** | **$5,891,427** | **$4,533,387** | **($1,358,040)** |
| | | | | |
| **Total Workyears** | **7,200.5** | **7,200.5** | **5,809.4** | **(1,391.1)** |

Note: Totals do not include proposed Agency-wide cancellation of funds.

### Introduction

Pollution comes in many forms with myriad impacts on human health and the environment. With the goal of clean and safe air, water, and land for all Americans, as well as safe chemicals, Congress enacted a range of environmental statutes that spell out EPA's core responsibilities. Our Nation has come a long way since EPA was established in 1970. We have made great progress in making rivers and lakes safe for swimming and boating, reducing the smog that clouded city skies, cleaning up lands that were once used as hidden chemical dumps, and providing Americans greater access to information on the safety of the chemicals all around us. Today we can see enormous progress—yet we still have important work to do.

In FY 2019, the Agency will work with states and tribes to more rapidly take action on their implementation plans for attaining air quality standards, reducing contaminants that can cause or exacerbate health issues. We will work with our state and tribal partners to provide for clean and safe water by updating aging infrastructure, both for drinking water and wastewater systems. The Agency will focus on advancing the cleanup of Superfund and brownfields sites, and will use a list of top priority sites to make progress on Superfund sites of particular concern. EPA's top priority for ensuring the safety of chemicals in the marketplace is the implementation of the new Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernizes the Toxic Substances and Control Act (TSCA) by creating new standards and processes for assessing chemical safety within specific deadlines. These efforts will be supported by strong compliance assurance and enforcement in collaboration with our state and tribal partners, up-to-date training for partners, and use of the best available science and research to address current and future environmental hazards, develop new approaches, and improve the foundation for decision making.

In FY 2019, EPA also proposes two new voluntary user fees programs to improve regulatory compliance in industry, and one new user fee to fund the ENERGY STAR program.

The Agency will collaborate more efficiently and effectively with other federal agencies, states, tribes, local governments, communities, and other partners and stakeholders to address existing pollution and prevent future problems. EPA will directly implement federal environmental laws in Indian country where eligible tribes have not taken on program responsibility.

With our partners, we will pay particular attention to vulnerable populations. Children and the elderly, for example, may be at significantly greater risk from elevated exposure or increased susceptibility to the harmful effects of environmental contaminants. Some low-income and minority communities may face greater risks because of proximity to contaminated sites or because fewer resources are available to avoid exposure to pollutants. Tribal ways of life such as traditional subsistence hunting, fishing, and gathering also may increase exposure to contaminants and increase risks. Much work remains and, together with our partners, we will continue making progress in protecting human health and the environment.

## Agency Priority Goals

The budget highlights EPA's FY 2018-2019 Agency Priority Goals (APGs) that advance EPA priorities and the Agency's FY 2018-2022 Strategic Plan. Four of the six APGs support Goal 1:

- APG-1: Improve air quality by implementing pollution control measures to reduce the number of nonattainment areas. By September 30, 2019, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 138 from a baseline of 166.

- APG-2: Empower communities to leverage EPA water infrastructure investments. By September 30, 2019, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act).

- APG-3: Accelerate the pace of cleanups and return sites to beneficial use in their communities. By September 30, 2019, EPA will make an additional 102 Superfund sites and 1,368 Brownfields sites ready for anticipated use (RAU).

- APG-4: Meet new statutory requirements to improve the safety of chemicals in commerce. By September 30, 2019, EPA will complete in accordance with statutory timelines (excluding statutorily-allowable extensions): 100% of required EPA-initiated Toxic Substances Control Act (TSCA) risk evaluations for existing chemicals; 100% of required TSCA risk management actions for existing chemicals; and 80% of TSCA pre-manufacture notice final determinations.

## FY 2019 Activities

***Objective 1: Improve Air Quality.*** **Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.**

As part of its mission to protect human health and the environment, EPA is dedicated to working in partnership with states to reduce the number of nonattainment areas in the United States. From 1970 to 2016, aggregate national emissions of the six criteria air pollutants[1] were reduced 73 percent, while Gross Domestic Product grew by over 253 percent.[2] Despite this progress, in 2016, more than 120 million people (about 40 percent of the U.S. population based on 2010 census data) lived in counties with monitored air quality that did not meet standards for at least one criteria pollutant. EPA works in cooperation with states, tribes, and local governments to design and implement air quality standards and programs. EPA relies on partnerships with other federal agencies, academia, researchers, industry, other organizations, and the public to achieve improvements in air quality and reduce public health risks.

EPA requests $410 million and 1,235.8 FTE in FY 2019 to improve air quality. This strategic objective is supported by core air program work highlighted below.

*National Ambient Air Quality Standards (NAAQS) Implementation*
EPA's criteria pollutant program is critical to continued progress in reducing public health risks and improving the quality of the environment. However, listening to and working with state and tribal partners to set and implement standards is key. The criteria pollutant program sets NAAQS which are then implemented by state, local and tribal air agencies who have primary responsibility under the Clean Air Act (CAA) for developing clean air plans.

In FY 2019, EPA will continue to prioritize key activities in support of attainment of the NAAQS. The Agency will address its CAA responsibilities by collaborating with and providing technical assistance to states and tribes to develop implementation plans for attaining the NAAQS and visibility requirements; reviewing state/tribal implementation plans; taking federal oversight actions such as approving state implementation plan/tribal implementation plan (SIP/TIP) submittals consistent with statutory obligations; developing regulations and guidance to implement standards; and addressing transported air pollution. EPA will focus on ways to improve the efficiency and effectiveness of the SIP/TIP process, including the Agency's own review process, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions to help move more quickly to attainment.

*Air Toxics*
The air toxics program develops and implements national emission standards for stationary and mobile sources and works with state, tribal and local air agencies to address air toxics problems in communities. EPA reviews air toxics emissions standards, required every eight years under the

[1] The Cagency Air Act (CAA) requires EPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants including carbon monoxide, lead, ground-level ozone, nitrogen dioxide, particulate matter, and sulfur dioxide.
[2] https://gispub.epa.gov/air/trendsreport/2017/#growth_w_cleaner_air

CAA, to determine if additional emission control technologies exist and, if so, EPA proposes more effective emission control technologies based on these reviews.

In FY 2019, EPA will continue to prioritize CAA and court-ordered obligations and will tier its work with an emphasis on meeting court-ordered deadlines to align with priorities and capacity. EPA will continue to conduct risk assessments to determine whether the Maximum Achievable Control Technology rules appropriately protect public health as required by Section 112 of the CAA.

*Federal Vehicle and Fuels Standards and Certification Program*
EPA develops, implements, and ensures compliance with national emission standards to reduce mobile source related air pollution from light-duty cars and trucks, heavy-duty trucks and buses, nonroad engines and vehicles, and from their fuels. The program also evaluates new emission control technology and provides information to state, tribal, and local air quality managers on a variety of transportation programs.

In FY 2019, the budget requests $75.1 million for the Federal Vehicle and Fuels Standards and Certification program, which will focus its efforts on prioritizing certification decisions to ensure that manufacturers are able to enter their engines and vehicles into commerce once their products have been certified. The Agency will continue to perform its compliance oversight functions on priority matters, where there is evidence to suggest noncompliance. EPA will continue to conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars.

*Atmospheric Protection Program (Previously the Climate Protection Program in FY 2017 Enacted)*
EPA implements the U.S. Greenhouse Gas Reporting Program, which requires mandatory greenhouse gas emissions reporting from large industrial source categories in the U.S., covering a total of 41 sectors and approximately 8,000 reporters. The data are shared with industry stakeholders, state and local governments, the research community, and the public to better understand emissions, inform opportunities, and communicate progress of actions. They also inform the annual Greenhouse Gas Inventory, a U.S. treaty obligation. In addition, EPA will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks. In FY 2019, the budget requests $13.5 million to continue to implement the Atmospheric Protection program.

*ENERGY STAR Fee Proposal*
The FY 2019 budget request includes a proposal to authorize EPA to administer the ENERGY STAR program through the collection of user fees. By administering the ENERGY STAR program through the collection of user fees, EPA would continue to provide a trusted resource for consumers and businesses who want to purchase products that save them money and help protect the environment. Entities participating in the program would pay a fee that would offset the costs for managing and administering the program. Through an upfront FY 2019 appropriation of $46 million to ensure continuous operation of the ENERGY STAR program, fee collections would begin after EPA undertakes a rulemaking process to determine what aspects of the program could be covered by fees and the level of fees, and to ensure that a fee system would not discourage entities from participating in the program or result in a loss of environmental benefits. The fee

collections would provide funding to replace to the extent allowable the upfront appropriation to cover, expenses to develop, operate, and maintain the ENERGY STAR program.

*Radiation*
The Agency measures and monitors ambient radiation and radioactive materials and assesses radioactive contamination in the environment. The Agency supports federal radiological emergency response and recovery operations under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

The Agency also has specific statutory responsibilities to protect the public from harmful radiation under its radiation protection program through its federal guidance and standard-setting activities, including: regulatory oversight at the Department of Energy's Waste Isolation Pilot Plant (WIPP);[3] the regulation of airborne radioactive emissions; and the development and determination of appropriate methods to measure radioactive releases and exposures under CAA Section 112.

In FY 2019, EPA's Radiological Emergency Response Team (RERT) will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will design and conduct essential training and exercises to enhance the RERT's ability to fulfill EPA's responsibilities and improve overall radiation response preparedness. The Agency also will continue to operate RadNet, the Agency's fixed ambient environmental radiation monitoring network for the U.S.

*Grants for State, Local and Tribal Air Quality Management*
For FY 2019, EPA requests $161 million to provide federal support for grants to state and local air quality management agencies and tribes where applicable, to manage and implement air quality control programs. In FY 2019, states will continue to be responsible for SIPs, which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility obligations. States also will operate and maintain their existing monitoring networks at baseline levels to provide high quality data used to develop and maintain clean air plans, for research, and for the public.

***Objective 2: Provide for Clean and Safe Water.*** **Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities**.

Providing support to ensure safe drinking water in communities, protecting surface water, and increasing water infrastructure project investment are high priorities for EPA. The nation's water resources are the lifeblood of our communities, supporting our economy and way of life. Across the country, we depend upon reliable sources of clean and safe water. Just a few decades ago, many of the nation's rivers, lakes, and estuaries were grossly polluted, wastewater sources received little or no treatment, and drinking water systems provided very limited treatment to water coming through the tap. Now over 90 percent of the population served by community water systems

[3] Additional information at: http://www.epa.gov/radiation/wipp/background.html.

receives safe drinking water, and formerly impaired waters have been restored and now support recreational and public health uses that contribute to healthy economies.

EPA will continue to provide loans and grants to states and tribes to improve infrastructure. Given that investment in infrastructure is necessary for economic growth and environmental protection and that EPA investments are catalyst for both, EPA's efforts will be used to support private and public investment in economic revitalization and improved environmental outcomes across the country. This requires that EPA strengthen its infrastructure programs (e.g., the drinking water SRF, clean water SRF, WIFIA) to better align EPA investments with each other and with other investments in pursuit of economic revitalization and improved environmental outcomes. At the same time, EPA will ensure that it is serving disadvantaged communities, leveraging private investment to improve the economy, and protecting human health and the environment.

In FY 2019, EPA will focus resources on supporting the modernization of outdated drinking water, wastewater, and stormwater infrastructure; creating incentives for new water technologies and innovation; and funding the core requirements of the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA). The Agency will look to provide states and tribes with flexibility to best address their particular priorities. FY 2019 resources requested include $2.9 billion and 1,530.5 FTE to support this objective**.** This strategic objective is supported by core water program work highlighted below.

*Water Infrastructure Investments*

We have made significant progress since enactment of the CWA, SDWA, and Marine Protection, Research, and Sanctuaries Act over 40 years ago. However, serious water quality and water infrastructure challenges remain. Many communities need to improve and maintain both drinking water and wastewater infrastructure and develop the capacity to comply with new and existing standards. Tens of thousands of homes, primarily in tribal and disadvantaged communities and the territories, lack access to basic sanitation and drinking water.

A top priority for EPA is modernizing the outdated water infrastructure on which the American public depends. These funding levels are for critical drinking water and wastewater infrastructure and further the President's ongoing commitment to infrastructure repair and replacement. These resources also would allow states, municipalities, and private entities to continue to finance high priority infrastructure investments that achieve or maintain compliance and protect human health and the environment. The FY 2019 budget requests $2.3 billion for the State Revolving Funds and $20 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program. WIFIA is expected to leverage significant funding for infrastructure and could provide up to $2 billion in direct credit assistance, which, when combined with other funding sources, could help to spur up to $4 billion in total infrastructure investment.[4]

EPA's water infrastructure programs also benefit from a close relationship with states, municipal, and tribal governments, as well as industry and other public groups. In addition to EPA's long-standing partnerships through the State Revolving Funds (SRFs), the new Water Infrastructure Finance and Innovation Act (WIFIA) credit program is working with both public and private eligible borrowers to fund vital infrastructure projects. WIFIA is an innovative and flexible

[4] This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

financing mechanism and, as demonstrated by the first round of applications and selected projects, the program encourages a wide variety of finance approaches.[5]

*Categorical Grants to States and Tribes*
Protecting the nation's water from pollution and contaminants relies on cooperation between EPA, states and tribes. States and tribes are best positioned to implement localized solutions to protect their waters. EPA will work with states, territories, tribes, and local communities to better safeguard human health; maintain, restore, and improve water quality; and make America's water systems sustainable and secure, supporting new technology and innovation wherever possible.

In addition to the SRFs, in FY 2019, EPA requests funding for the following categorical grants that support state and tribal implementation of the CWA and the SDWA: Public Water System Supervision, Pollution Control (Sec. 106), Underground Injection Control, and Wetlands Program Development Grants. EPA will work with states and tribes to target the funds to core requirements while providing flexibility to best address their particular priorities. Funding for the categorical grants to states and tribes to support core water programs is $265 million, including an additional $27 million for the new Multipurpose Grant program, which can be used for any required statutory responsibility.

*Safe Drinking Water*
For FY 2019, EPA requests $84 million for Drinking Water Programs, including drinking water programs funded under the Science and Technology appropriation. EPA will work to reduce lead risks by developing proposed revisions to the Lead and Copper Rule and to develop regulations to implement the Water Infrastructure Improvement for the Nation Act and the Reduction of Lead in Drinking Water Act. EPA also will continue to work with states and tribes to protect underground sources of drinking water from injection of fluids. In addition, EPA will continue work with states to develop the next generation Safe Drinking Water Information System tool used by the majority of state drinking water programs. The tool will provide the following benefits: improvements in program efficiency and data quality, greater public access to drinking water data, facilitation of electronic reporting, reductions in reporting burdens on laboratories and water utilities, reductions in data management burden for states, and ultimately reduction in public health risk.

*Clean Water*
For FY 2019, EPA requests $175 million for Surface Water Protection and $18 million for Wetlands. The FY 2019 budget supports the following core Surface Water Protection program components: water quality criteria, standards and technology-based effluent guidelines; National Pollutant Discharge Elimination System; water monitoring; Total Maximum Daily Loads; watershed management; water infrastructure and grants management; core wetlands programs and CWA Section 106 program management.

*Homeland Security*
In FY 2019, EPA will coordinate and support protection of the nation's critical water infrastructure from terrorist threats and all-hazard events. Under this homeland security mission, EPA will train on an annual basis over 2,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger water and

[5] https://www.epa.gov/wifia/wifia-fy-2017-letters-interest-and-selected-projects.

wastewater services. EPA will continue to develop the most efficient mechanisms for detecting and addressing harmful substances in the water distribution system. In addition, EPA will fulfill its obligations under Executive Order (EO) 13636 – *Improving Critical Infrastructure Cybersecurity* – which designates EPA as the lead federal agency responsible for cybersecurity in the water sector. In FY 2019, EPA will conduct nationwide, in-person training sessions in cybersecurity threats and countermeasures for about 200 water and wastewater utilities.

***Objective 3: Revitalize Land and Prevent Contamination.*** **Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.**

EPA works to improve the health and livelihood of all Americans by cleaning up and returning land to productive use, preventing contamination, and responding to emergencies. In FY 2019, the Agency is prioritizing the accelerated pace of cleanups and reuse while addressing risks to human health and the environment. Collaborating with and effectively leveraging efforts of other federal agencies, industry, states, tribes, and local communities, EPA uses its resources to enhance the livability and economic vitality of neighborhoods in and around hazardous waste sites. EPA partners with states, tribes and industry to prevent and reduce exposure to contaminants. Superfund and the Resource Conservation and Recovery Act (RCRA) provide legal authority for EPA's work to protect and restore the land. The Agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites, allowing land to be returned to productive use. Under RCRA, EPA works in partnership with states and tribes to address risks associated with the generation, transportation, treatment, storage or disposal of waste, and to clean up contamination at active sites.

EPA collaborates with international, state, tribal, and local governments to reach its goals while considering the effects of decisions on communities. EPA engages communities to help them understand and address risks posed by intentional and accidental releases of hazardous substances into the environment and to ensure that communities have an opportunity to participate in environmental decisions that affect them. EPA's efforts are guided by scientific data, tools, and research that alert us to emerging issues and inform decisions on managing materials and addressing contaminated properties.

For FY 2019, EPA requests $1.10 billion and 2,045.5 FTE to support this objective, EPA will focus on implementing core programs where a federal presence is required by the statute. This strategic objective is supported by core land program work; highlights include:

*Cleaning Up Contaminated Sites*
EPA's cleanup programs (i.e., Superfund Remedial, Superfund Federal Facilities, Superfund Emergency Response and Removal, RCRA Corrective Action, Underground Storage Tank and Brownfields) work cooperatively with state, tribal, and local partners to take proactive steps to facilitate the cleanup and revitalization of contaminated properties. Cleanup programs protect both human health and the environment and return sites to productive use, which is important to the economic well-being of communities. To this end, EPA has established four strategic measures within the FY 2018-2022 EPA Strategic Plan to make additional Superfund, Brownfields, RCRA

Corrective Action and Leaking Underground Storage Tanks (LUST) sites ready for anticipated use. For FY 2019, EPA requests $865 million to fund EPA's cleanup programs.

*Superfund Remedial*
One of EPA's top priorities is accelerating progress on Superfund sites. EPA convened a Superfund Task Force that identified 42 recommendations to streamline and improve the Superfund process. These recommendations and other innovative ideas will be considered and applied to Superfund sites with priority given to addressing sites on the National Priorities List (NPL).[6]

Building on recommendations from the Superfund Task Force Report, the Agency will continue to help communities clean up and revitalize once productive properties by: removing contamination; enabling economic development; taking advantage of existing infrastructure; and maintaining, and improving quality of life. There are multiple benefits associated with cleaning up contaminated sites: reducing mortality and morbidity risk; preventing and reducing human exposure to contaminants; improving nearby property values; making land available for commercial, residential, industrial, or recreational reuse; and promoting community economic development. For example, research shows that residential property values within three miles of Superfund sites increased between 18.7 to 24.4 percent when sites were cleaned up and deleted from the NPL.[7]

*Superfund Removal*
Working collaboratively with partners across the country, EPA engages with communities in site cleanup decisions, fosters employment opportunities in communities during and after remedy construction, and promotes the redevelopment of blighted areas. Over the last 10 years (FY 2007 – FY 2016), EPA completed or oversaw over 3,655 Superfund removal actions across the country. This work is all performed as part of the overarching effort to clean up contaminants and protect human health and the environment. Superfund properties are often reused as commercial facilities, retail centers, government offices, residential areas, industrial and manufacturing operations, parks, and recreational areas. The reuse of a site often can play a role in economically revitalizing a community. As of FY 2017, EPA data shows that at 487 Superfund sites in reuse, approximately 6,622 businesses are generating $43.6 billion in sales and employ more than 156,352 people who earn a combined income of $11.2 billion.[8]

In the case of a national emergency, EPA's Superfund Emergency Response and Removal program is charged with preventing limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. Typical situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to

[6] Please see the Superfund Task Force Recommendations at https://www.epa.gov/sites/production/files/2017-07/documents/superfund_task_force_report.pdf.
[7] Gamper-Rabindran, Shanti and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," Journal of Environmental Economics and Management 65(3): 345-360.
[8] For more information on Redevelopment Economics and in depth case studies see www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.

people from exposure to hazardous substances. EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan.[9]

*RCRA Corrective Action*

EPA works in partnership with states, having authorized 44 states and one territory to directly implement the RCRA Corrective Action program[10]. This program is responsible for overseeing and managing cleanups at active RCRA sites. States have requested EPA participate in work sharing under this program and, consequently, the Agency serves as lead or support for a significant number of complex and challenging cleanups in both non-authorized and authorized states.

*Underground Storage Tanks*

The Underground Storage Tank (UST) program has achieved significant success in addressing releases since the beginning of the program. End of year FY 2017 data shows that, of the approximately 538,000 releases reported since the beginning of the UST program in 1988, more than 469,000 (or 87 percent) have been cleaned up. Approximately 68,000 releases remain that have not reached cleanup completion. EPA is working with states to develop and implement specific strategies and activities applicable to their particular sites to reduce the UST releases remaining to be cleaned up.[11] The important work of this program is demonstrated by a 2017 study found that high profile UST releases decrease nearby property values by 2 to 6 percent. However, once cleanup is completed, property values rebound by a similar margin.[12] A total of $50.9 million is being requested in FY 2019 for Underground Storage Tank direct cleanup and state cooperative agreements.

*Brownfields*

By awarding Brownfields grants, EPA is making investments in communities so that they can realize their own visions for environmental health, economic growth, and job creation. Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a Brownfields site that receives EPA funding.[13] As of the end of FY 2017, grants awarded by the program have led to over 69,200 acres of idle land made ready for productive use and over 129,240 jobs and $24.7 billion leveraged. In FY 2019, the Agency will continue to make additional brownfields sites ready for anticipated use (RAU) through performance goals established under

[9] For additional information, refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.

[10] State implementation of the RCRA Corrective Action program is funded through the STAG (Program Project 11) and matching State contributions.

[11] Sullivan, K. A. and A. Kafle. Do more frequent inspections improve compliance? Evidence from underground storage tank facilities in Louisiana. Office of Communications, Partnerships and Analysis (OCPA) Working Paper No. 2017-05. May 2017. https://www.epa.gov/sites/production/files/2017-06/documents/olem_ocpa_working_paper_do_more_frequent_inspections_improve_compliance.pdf.

[12] Guignet, Dennis, Robin Jenkins, Matthew Ranson, and Patrick Walsh, "Contamination and Incomplete Information: Bounding Implicit Prices using High-Profile Leaks," *Journal of Environmental Economics and Management,* Forthcoming.

[13] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY16; and (2) census data from the 2011-2015 American Community Survey.

the FY 2018-2022 EPA Strategic Plan.[14] A 2017 study found that housing property values increased 5 to 15.2 percent near brownfield sites when cleanup was completed.[15]

*Preserving Land*
Preventing the release of contamination can be one of the most cost-effective ways of providing Americans with clean land. With our state and tribal partners, EPA works to prevent releases of contamination, allowing the productive use of facilities and land and contributing to communities' economic vitality.

*Chemical Facility Safety*
The FY 2019, EPA requests $10.0 million for the State and Local Prevention and Preparedness program. EPA plays a valuable role in working with states and communities to build the capacity to prevent, prepare for, and respond to emergencies at chemical facilities. The program establishes a structure composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, and property from chemical risks through advanced technologies, community and facility engagement, and improved safety systems. In FY 2019, the program will inspect Risk Management Plan facilities to ensure compliance with accident prevention and preparedness activities.

*State and Local Prevention and Preparedness Fee Proposal*
The budget includes a new fee proposal in the State and Local Prevention and Preparedness program to better support compliance assistance work for RMP facilities. The new voluntary fee and service will provide support for facilities in complying with EPA regulations via an on-site walk-through and assistance. Authorizing language for the new fee collection accompanies the budget submission.

*RCRA Waste Management*
The FY 2019 budget provides $41.9 million to the RCRA Waste Management program. States have primary responsibility for almost all of the efforts related to permitting hazardous waste units (such as incinerators and landfills) at treatment, storage, and disposal facilities. In FY 2019, permits for these activities will be issued, updated, or maintained. EPA directly implements the entire RCRA program in two states and provides leadership, work-sharing, and support to the states and territories authorized to implement the permitting program. In addition, EPA reviews and approves Polychlorinated Biphenyls (PCB) cleanup, storage, and disposal activities as this federal authority is not delegable to state programs.

*Hazardous Waste Electronic Manifest*
On October 5, 2012, the Hazardous Waste Electronic Manifest Establishment Act was enacted, requiring EPA to develop and maintain a hazardous waste electronic manifest system. The system is designed to, among other functions, assemble and maintain the information contained in the estimated five million manifest forms accompanying hazardous waste shipments across the nation annually. When fully implemented, the electronic hazardous waste manifest program will reduce the reporting burden for industry by approximately $75 million annually. In addition, the

[14] EPA's ACRES database.
[15] Haninger, K., L. Ma, and C. Timmins. 2017. The Value of Brownfield Remediation. *Journal of the Association of Environmental and Resource Economists, 4(1): 197-241.*

e-Manifest system will improve knowledge of waste generation and final disposition, enhanced access to manifest information, and provide greater transparency for the public about hazardous waste shipments. In FY 2019, EPA will operate the E-Manifest system and the Agency will collect and utilize fees for the operation of the system and necessary program expenses.

*Oil Spill Prevention Preparedness and Response*
Inland oil spills can threaten human health, cause severe environmental damage, and create financial loss to industry and the public. The Oil Spill program helps protect the American people by effectively preventing, preparing for, responding to, and monitoring inland oil spills. EPA serves as the lead responder for cleanup of all inland zone spills, including transportation-related spills, and provides technical assistance and support to the U.S. Coast Guard for coastal and maritime oil spills. In FY 2019, EPA requests a total of $12.3 million for the Oil Spill Prevention, Preparedness and Response program.

*Oil Spill Prevention, Preparedness and Response Fee Proposal*
The budget includes a new fee proposal in the Oil Spill Prevention, Preparedness, and Response program to better support compliance assistance work for Facility Response Plan (FRP) and Spill Prevention Control and Countermeasure (SPCC) facilities. The new voluntary fee and service will provide support for facilities in complying with EPA regulations via an on-site walk-through and assistance. Authorizing language for the new fee collection accompanies the budget submission.

*Homeland Security*
Terrorist attacks, industrial accidents, and natural disasters can result in acutely toxic chemical, biological or radiological (CBR) contamination causing sickness or death, disruption of drinking water and wastewater services, economic hardship in communities, and even shutdown of urban areas. EPA's Homeland Security work is an important component of the Agency's prevention, protection, and response activities. The FY 2019 budget includes $31.8 million to maintain Agency capability to respond to incidents that may involve harmful CBR substances. Resources also will allow the Agency to develop and maintain expertise and operational readiness for all phases of consequence management following a CBR incident and sustain specialty equipment such as the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) plane and Portable High-throughput Integrated Laboratory Identification (PHILIS) units.

***Objective 4: Ensure Safety of Chemicals in the Marketplace.*** **Effectively implement the Toxics Substances Control Act (TSCA), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.**

Chemicals and pesticides released into the environment as a result of their manufacture, processing, use, or disposal can threaten human health and the environment. EPA gathers and assesses information about the risks associated with chemicals and pesticides and implements risk management strategies when needed. EPA's research efforts will help advance the Agency's ability to assess chemicals more rapidly and accurately. In FY 2019, EPA's request for Ensuring the Safety of Chemicals in the Marketplace is $161.6 million and 997.6 FTE.

*Toxic Substances Control Act (TSCA)*

In 2016, TSCA was amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. These amendments give EPA significant new, as well as continuing, responsibilities for ensuring that chemicals in or entering commerce do not present unreasonable risks to human health and the environment, including unreasonable risks to potentially exposed or susceptible subpopulations. EPA works to ensure the safety of: (1) existing chemicals (those already in use when TSCA was first enacted in 1976 and those that have entered commerce following new chemical review by EPA), by obtaining and evaluating chemical data and by taking regulatory action where appropriate, to prevent any unreasonable risk posed by their use; and (2) new chemicals by reviewing and taking action on new chemical notices submitted by industry, including Pre-Manufacture Notices, to ensure that no unreasonable risk will be posed by such chemicals upon their entry into U.S. commerce.

EPA is on track to complete risk evaluations for an initial set of ten chemicals in accordance with statutory timelines. The Agency published Scoping Documents for these evaluations on schedule in June 2017. On the new chemicals front, the Agency has eliminated a backlog of 300 new chemical cases under review when TSCA was amended on June 22, 2016 as well as a smaller number of cases submitted thereafter. In FY 2019, increased resources will support the Agency's significant continuing and new responsibilities under the TSCA for ensuring that new and existing chemicals are evaluated in a timely manner and that any unreasonable risks are addressed.

Implementation of the 2016 amendments to TSCA is one of EPA's top priorities. In FY 2019, $58.6 million is proposed to be allocated to the TSCA Chemical Risk Review and Reduction Program. EPA will use these resources to meet the statutory requirements and deadlines of TSCA, as amended. The Act also authorized a sustainable source of funding for EPA to carry out its new responsibilities. The Agency will now be able to collect user fees from chemical manufacturers and processers to defray 25 percent of its costs for administering certain sections[16] of TSCA, as amended.[17] The funded activities also will support the Agency's efforts to meet the strategic targets set out in EPA's FY 2018-2022 Strategic Plan.

In FY 2019, the Agency will initiate risk management actions to address any unreasonable risks identified by the completed chemical risk evaluations and will finalize those actions within two years, with the possibility of an extension of up to two additional years, as required by law. Risk management actions may include prohibiting or restricting the manufacture, processing, distribution in commerce or commercial use of a chemical, and imposing requirements on labeling or recordkeeping. EPA also will carry out the new fast-track process to address certain Persistent, Bioaccumulative and Toxic chemicals within the period prescribed by law.

*Toxic Release Inventory (TRI)*

EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting timely, high-quality and relevant information. The Toxics Release Inventory (TRI) program supports EPA's mission, and its chemical safety program in particular,

[16] The costs of implementing TSCA (as amended) Sections 4, 5 and 6 are defrayable up to the statutory caps, as are the costs of collecting, processing, reviewing and providing access to and protecting from disclosure, as appropriate, chemical information under Section 14.

[17] The authority to assess fees is conditioned on appropriations for the CRRR Program, excluding fees, being held at least equal to the amount appropriated for FY 2014.

by annually releasing to the public data reported by industrial and federal facilities on the quantity of toxic chemicals they release and other waste management (e.g., recycling) and pollution prevention practices. These data pertain to over 650 toxic chemicals from approximately 20,000 industrial and federal facilities. The TRI Program is a primary source of toxic chemical release data for communities, non-governmental organizations, industrial facilities, academia and government agencies. The Agency supports these activities through targeted enhancements to its systems for managing information flows and scientific tools and models.

*Pesticides*

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is the primary federal law governing oversight of pesticide manufacture, distribution, and use in the United States. FIFRA requires EPA to register pesticides based on a finding that they will not cause unreasonable adverse effects on people and the environment, taking into account the economic, social, and environmental costs and benefits of the uses of the pesticides. Each time the law was amended, Congress has strengthened FIFRA's safety standards while continuing to require consideration of pesticide benefits.

Every 15 years, EPA reevaluates pesticides that were previously registered to ensure that they meet current standards. EPA's Pesticides program remains on track to meet the statutory completion date for this 15-year Registration Review period, October 1, 2022. Forward planning serves to ensure that, through 2022, EPA will complete all FIFRA mandated decisions for the Pesticides Registration Review Program. At the end of FY 2017, 239 interim or final decisions of a known universe of 725 cases were completed. Through PRIA, the program continues to ensure that new products meet U.S. safety standards, expediting the licensing of new products so they are available in the marketplace for use in agricultural, consumer and public health pest control needs.

In addition to FIFRA, the Federal Food, Drug, and Cosmetic Act (FFDCA) governs the maximum allowable level of pesticides in and on food grown and sold in the United States. The legal level of a pesticide residue on a food or food item is referred to as a tolerance. FFDCA requires that the establishment, modification, or revocation of tolerances be based on a finding of a "reasonable certainty of no harm." Whereas FIFRA is a risk-based statute that allows for consideration of the benefits of pesticide use in determining whether to register a pesticide, FFDCA is a risk-only statute, and benefits cannot be used in determining whether the tolerance meets the safety standard. When evaluating the establishment, modification, or revocation of a tolerance, EPA tries to harmonize the tolerance with the maximum residue levels set by other countries to enhance the trade of agricultural commodities.

EPA's pesticide licensing program evaluates new pesticides before they reach the market and ensures that pesticides already in commerce are safe when used in accordance with the label as directed by FIFRA, FFDCA, and the Food Quality Protection Act (FQPA). EPA is responsible for licensing (registering) new pesticides and periodically reevaluating (registration review) older pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations, while considering the benefits associated with the use of the pesticide.

In FY 2019, $93.3 million is provided to support EPA's Pesticide registration review and registration program. Identifying, assessing, and reducing the risks presented by the pesticides on which our society and economy relies is integral to ensuring environmental and human safety. Chemical and biological pesticides help meet national and global demands for food. They provide effective pest control for homes, schools, gardens, highways, hospitals, and drinking water treatment facilities, while also controlling vectors of disease. The Pesticides program ensures that the pesticides available in the U.S. are safe when used as directed.

The program places priority on reduced risk pesticides that, once registered, will result in increased societal benefits. In FY 2019, appropriated funding will be augmented by approximately $48 million in Pesticides registration and maintenance user fees, as authority to collect fees is expected to be reauthorized by PRIA IV legislation which is currently being considered by Congress.

In FY 2019, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with all statutory requirements. In addition, the Agency will be reviewing, under the registration review program, pesticides that are already in the market against current scientific standards for human health. EPA's FY 2019 activities will continue to involve increased efforts on comprehensive risk assessments to protect the environment.

The Agency also will continue to invest resources to improve the compliance of pesticide registrations with the Endangered Species Act. A portion of the funding also will ensure that pesticides are correctly registered and applied in a manner that protects water quality. EPA will continue registration and registration review requirements for antimicrobial pesticides. Additionally, the Pesticides program continues to focus on pollinator health, working with other federal partners, states, and private stakeholder groups to stem pollinator declines and increase pollinator habitat.

Together, these activities and programs will minimize exposure to pesticides, maintain a safe and affordable food supply, address public health issues, and minimize property damage that can occur from insects, pests and microbes. The Agency's worker protection, certification, and training programs will encourage safe pesticide application practices. EPA also will continue to emphasize reducing exposures from pesticides used in and around homes, schools, and other public areas.

## Cooperative Federalism

Cooperative Federalism: Rebalance the power between Washington and the states to create tangible environmental results for the American people.

STRATEGIC OBJECTIVES:

- Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.
- Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.

### GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Cooperative Federalism** | **$317,037.4** | **$316,713.0** | **$217,148.0** | **-$99,565.0** |
| Enhance Shared Accountability | $300,972.1 | $300,825.0 | $215,148.0 | -$85,677.0 |
| Increase Transparency and Public Participation | $16,065.3 | $15,888.0 | $2,000.0 | -$13,888.0 |
| Total Authorized Workyears | 1,150.6 | 1,228.1 | 831.0 | -397.1 |

## Goal 2: Cooperative Federalism

**Strategic Goal: Rebalance the power between Washington and the states to create tangible environmental results for the American people.**

| Cooperative Federalism | FY 2017 Enacted Budget | FY 2018 Annualized CR | FY 2019 President's Budget | Delta FY 2019 – FY 2018 |
|---|---|---|---|---|
| 2.1 Enhance Shared Accountability | $302,882 | $300,825 | $215,148 | ($85,677) |
| 2.2 Increase Transparency and Public Participation | $15,997 | $15,888 | $2,000 | ($13,888) |
| **Goal 2 Total** | **$318,879** | **$316,713** | **$217,148** | ($99,565) |
| | | | | |
| **Total Workyears** | **1,228.1** | **1,228.1** | **831.0** | (397.1) |

Note: Totals do not include proposed Agency-wide cancellation of funds.

**Introduction:**

The idea that environmental protection is a shared responsibility between the states, tribes, and the federal government is embedded in our environmental laws, which in many cases provide states and tribes the opportunity and responsibility for implementing environmental protection programs. More than 45 years after the creation of EPA and the enactment of a broad set of federal environmental protection laws, most states, and to a lesser extent territories and tribes, are authorized to implement environmental programs within their jurisdictions in lieu of EPA-administered federal programs. Specifically, states have assumed more than 96 percent of the delegable authorities under federal law.[18] EPA retains responsibility for directly implementing federal environmental programs in much of Indian country where eligible tribes have not taken on program responsibility. There are also programs that by statute may not be delegated to the states or tribes. Recognizing these evolving responsibilities, EPA will facilitate constructive dialogue with states and tribes to ensure maximum utilization of resources. EPA will adapt its practices to reduce duplication of effort with authorized states and tribes, and tailor its oversight of delegated programs.

Cooperative federalism – the relationship between states, tribes and EPA – is not just about who makes decisions, but about how decisions are made and a sense of shared accountability to provide positive environmental results. EPA understands that improvements to protecting human health and the environment cannot be achieved by any actor operating alone, but only when the states, tribes, and EPA, in conjunction with affected communities, work together in a spirit of trust, collaboration, and partnership. Effective environmental protection is best achieved when EPA and its state and tribal partners work from a foundation of transparency, early collaboration – including public participation – and a spirit of shared accountability for the outcomes of this joint work. This foundation involves active platforms for public participation, including building the capacity of the most vulnerable community stakeholders to provide input. With these public participation opportunities, the beneficiaries of environmental protection – the American people – will be able

[18] Environmental Council of the States (ECOS) Paper, "Cooperative Federalism 2.0," June 2017.

to more meaningfully engage through their communities, their local governments, and their state and tribal governments. Including the public's voice in EPA's policy, regulatory, and assistance work, particularly the voices of the most vulnerable to environmental and public health challenges among us, is essential to meeting their needs as the Agency implements its statutory responsibilities.

EPA also recognizes that meeting the needs of states, tribes, local governments, and communities, and achieving environmental improvements cannot be done in isolation from economic growth. Opportunities for prosperous economic growth and clean air, water, and land are lost without effective infrastructure investments that align with community needs. This is especially true for infrastructure investments that repair existing systems; support revitalization of existing communities and buildings; and lead to the cleanup and redevelopment of previously-used sites and buildings. A prime example of cooperative federalism leading to development in communities is EPA's State Revolving Fund (SRF) programs. The revolving nature of the Drinking Water and Clean Water SRF funds and substantial state contributions have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far the nation has received close to three dollars of investment in water infrastructure. EPA will optimize and align its relevant programs to catalyze other resources, support beneficial infrastructure investments, and meet community needs for thriving economies and improved environmental and human health outcomes.

## FY 2019 Activities

***Objective 1: Enhance Shared Accountability.*** **Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.**

In the spirit of cooperative federalism, EPA and its partners have made enormous progress in protecting air, water, and land resources. EPA recognizes that states and tribes vary in the environmental challenges that they face due to variations in geography, population density, and other factors. EPA will maximize the flexibilities provided by law to take each state's unique situation into account when making regulatory and policy decisions. Multipurpose Grants are an example of this commitment to cooperative federalism. These grants will allow flexibility for our state and tribal partners by allowing them to target funds to their highest priority statutory responsibilities. EPA also directly implements the majority of federal environmental programs in Indian country. The Agency actively works with tribes to develop their capacity to administer environmental programs and to enable tribes that choose to implement federal environmental laws and programs for their lands. The unique relationship among EPA and its co-regulators is the foundation of the nation's environmental protection system; each organization fulfills a critical role based on its expertise, abilities, and responsibilities in protecting and improving human health and the environment.

EPA recognizes the advances states and tribes have made in implementing environmental laws and programs. This Administration will undertake a series of initiatives to rethink and assess where we are and where we want to be with respect to shared governance. These initiatives will clarify the Agency's statutory roles and responsibilities and tailor state and tribal oversight to maximize our return on investment and reduce burden on states and tribes, while ensuring continued progress in meeting environmental laws.

In addition, EPA, with its state, tribal, and local partners, ensures consistent and fair enforcement of federal environmental laws and regulations. The Agency works jointly with its co-regulators to protect human health and the environment, using a full set of compliance assurance tools, such as compliance assistance and monitoring; electronic reporting; traditional enforcement; grants to states and tribes; and tribal capacity building. EPA is building on progress made using E-Enterprise for the Environment, a plat form for transformative change that operationalizes cooperative federalism principles. EPA's E-Enterprise partnership with states and tribes modernizes the way we do the business of environmental protection.

EPA directly implements the majority of federal environmental programs in Indian country. The Agency actively works with tribes to develop their capacity to administer environmental programs and to enable tribes that choose to implement federal environmental laws and programs for their lands. Consistent with the 1984 Indian Policy and EPA policies on consultation and treaty rights[19], EPA will work on a government-to-government basis to build tribal capacity to implement federal programs through delegations, authorizations, and primacy designations to enable tribes to meaningfully participate in the Agency's policy making, standard setting, and direct implementation activities under federal environmental statutes. For FY 2019, EPA requests $217 million and 831 FTE to help enhance EPA's shared accountability and build cooperative federalism.

*Shared Governance*

To develop a future model of shared governance that takes into account the progress states and tribes have made in protecting human health and the environment, the Agency will undertake an analysis of EPA's statutory roles and responsibilities to determine the Agency direction in light of priorities. The Agency will work with states and tribes to find approaches to shared governance, which provide flexibility and streamline oversight of state and tribal programs. As part of this process, the Agency will seek to understand which approaches currently are working well for state, tribal and local co-regulators. EPA will pilot new approaches to oversight (e.g., permit reviews) where we have the legal flexibility to do so and streamline those processes by which EPA reviews and approves state and tribal actions. EPA will continue to work with states and tribes through E-Enterprise, focused on how we work and plan together, agree on priorities, and allocate roles and responsibilities to update processes and programs. Through shared governance – engaging early and meaningfully with states and tribes – the Agency will use E-Enterprise to deliver streamlined processes as well as accessible, reliable information and data that benefit co-regulators and the regulated community.

[19] "EPA Policy for the Administration of Environmental Programs on Indian Reservations," "EPA Policy on Consultation and Coordination with Indian Tribes," and "EPA Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights."

*Compliance Assurance*

The Agency will look for cost-effective ways to enhance the compliance assurance tool box in collaboration with its state, tribal, local, federal, and industry partners. For example, the E-Enterprise Web Portal offers a platform or gateway for making shared services available to states, tribes, and EPA to transact business (e.g., e-permitting and reporting). It also provides information for the regulated community (e.g., compliance assistance information). Tools and services are designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes. EPA will expand its compliance assistance work by continuing to partner with third-party organizations and federal agencies to support the 17 existing web-based, sector-specific compliance assistance centers[20] and developing new centers. In general, an expanded and modernized compliance assurance tool box will enhance EPA's ability to tailor compliance assurance approaches to the differing needs and challenges among states and regulated entities. EPA also is working closely with states and tribes to develop new compliance tools and approaches to make programs more effective and efficient in promoting compliance and remedying violations. Some of the Agency's ongoing collaborative efforts with the Environmental Council of the States (ECOS) include[21] producing webinars to help identify new compliance approaches that EPA could pilot and evaluate; increasing availability of training; and preparing for advances in pollution monitoring technology.[22]

A key component of EPA's overall compliance assurance program is compliance monitoring. Compliance monitoring allows the regulatory agencies to detect noncompliance and promote compliance with the nation's environmental laws. Effective targeting of compliance monitoring plays a central role in achieving the goals EPA has set for protecting human health and the environment. EPA, state, and tribal inspectors often provide regulated entities with compliance assistance during the inspection process. On a national level, EPA works closely with individual states, tribes, and state and tribal associations to develop, modernize, and implement national compliance monitoring strategies to ensure a level playing field for regulated entities across the country. EPA principally focuses compliance monitoring activities, such as field inspections, electronic reporting, and data analysis tools, for those programs that are not delegated to states and tribes. The Agency provides monitoring, program evaluations, and capacity building to support and complement authorized state, tribal, and local government programs. The Agency will work with its state and tribal partners to enhance compliance monitoring tools and increase the use of Lean practices. Through E-Enterprise for the Environment, EPA, states, tribes, and territories will collaborate to develop smart mobile tools to enhance the effectiveness and efficiency of state, tribal, and EPA inspectors, and support advanced monitoring technology. The FY 2019 budget requests includes $87.4 million and 428.7 FTE to fund EPA's compliance monitoring activities.

*International Partnerships*

To achieve the Agency's domestic environmental and human health objectives, EPA will work with international partners to address international sources of pollution, as well as the impacts of pollution from the United States on other countries and the global environment. Pollution impacts air, water, food crops, and food chains, and can accumulate in foods such as fish. In FY 2019, EPA

[20] For more information on compliance assistance centers, see https://www.epa.gov/compliance/compliance-assistance-centers.
[21] For more information on OECA's collaboration with ECOS via E-Enterprise, see Article: Advanced Monitoring Technology: Opportunities and Challenges. A Path Forward for EPA, States, and Tribes.
[22] For more information on a broader range of collaborations between OECA and ECOS, see Compendia of Next Generation Compliance Examples in Water, Air, Waste, and Cleanup Programs.

will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. This budget includes $4.2 million to support the International Sources of Pollution program. EPA efforts will include working with international partners to strengthen environmental laws and governance to more closely align with U.S. standards and practices and to help level the playing field for U.S. industry.

***Objective 2: Increase Transparency and Public Participation*. Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.**

EPA will strengthen its community-driven approach, which emphasizes public participation to better partner with states, tribes, and communities and to maximize the support and resources of the entire Agency to create tangible environmental results. The Agency will deploy its collective resources and expertise to collaborate with states, tribes, and communities and support locally-led, community-driven solutions to improved environmental protection and economic growth. EPA will increase transparency with industry, environmental groups and other stakeholders; and facilitate public participation, emphasizing cooperation and collaboration, especially at the early stages of Agency actions. This will provide a more comprehensive understanding of community needs.

The Agency also will coordinate better across its programs and with federal partners to ensure mutual efforts are aligned, including consideration of vulnerable groups and communities in decisions, and will reflect community needs in its actions and investments, recognizing that the needs of rural communities may not be the same as urban areas. Increasing transparency and public participation in EPA's work with other agencies will enhance the Agency's ability to partner with states, tribes, and local governments and increase responsiveness to the needs of their most vulnerable communities. EPA will serve as a convener and leverage resources with new and existing partners to deliver services more efficiently and effectively. The Agency also will engage with regulated entities to identify reforms to more efficiently and effectively meet the nation's environmental goals.

EPA will meet community needs through public participation, building community capacity through grants, technical assistance, partnering, and meaningful engagement. The Agency will leverage recommendations provided by federal advisory committees, such as the National Environmental Justice Advisory Council (NEJAC), LGAC, and Children's Health Protection Advisory Committee (CHPAC), and focus on partnerships representing vulnerable populations, such as youth, the elderly, and low-income communities. The SRFs are one example of how the Agency provides needed financing to such populations, particularly small and rural communities. In support of this aspect of our work, we are requesting continued flexibility for subsidization of SRF loan to communities. Specifically, the Agency will engage with the focus communities identified by EPA regions to understand each community's goals and identify its environmental priorities and needs, recognizing that rural communities and more urban areas may have different priorities.

To further integrate and implement community environmental considerations within EPA programs, the Agency will create tools to facilitate incorporation of community understanding, needs, and concerns across program activities and advance more systematic incorporation of existing tools and needs, such as use of the Environmental Justice Screening and Mapping Tool (EJSCREEN) and EnviroAtlas. EPA will develop a cross-Agency communities team to lead regional involvement in and resourcing of community-based environmental work through a fully-integrated resource platform.

The Agency will work to coordinate across the federal government, with EPA regional offices partnering with federal agencies in focus communities to deliver services more efficiently and effectively. Such partnerships will leverage resources and expertise from across EPA and a range of outside partners to advance economic revitalization through the environmental and health goals of communities. The Agency also will continue leadership of and involvement in the Office of Management and Budget (OMB) Community Solutions Taskforce to better access and leverage resources from across federal agencies, and will strengthen coordination with the Interagency Working Group on Environmental Justice to better integrate EPA priorities and support and engage communities. In addition, EPA will support and align its work with the activities and priorities of the President's Task Force on Environmental Health Risks and Safety Risks to Children.

EPA also will focus on enhancing the FOIA process. The complexity and volume of electronic documents required to be searched, collected, and reviewed has increased over time. The Agency will ensure that it can support the timely searching and collection of electronically-stored information for purposes of responding to FOIA requests and other information needs in a cost-effective, sustainable manner.

## Rule of Law and Process

Rule of Law and Process: Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law.

STRATEGIC OBJECTIVES:

- Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.
- Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.
- Refocus the EPA's robust research and scientific analysis to inform policy making.
- Issue permits more quickly and modernize our permitting and reporting systems.
- Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

### GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Rule of Law and Process** | **$1,898,819.1** | **$1,888,357.0** | **$1,615,812.0** | **-$272,545.0** |
| Compliance with the Law | $408,698.8 | $401,843.0 | $364,326.0 | -$37,517.0 |
| Create Consistency and Certainty | $72,886.1 | $68,898.0 | $60,366.0 | -$8,532.0 |
| Prioritize Robust Science | $490,070.0 | $478,088.0 | $255,046.0 | -$223,042.0 |
| Streamline and Modernize | $37,821.7 | $38,058.0 | $29,021.0 | -$9,037.0 |
| Improve Efficiency and Effectiveness | $889,342.5 | $901,470.0 | $907,053.0 | $5,583.0 |
| Total Authorized Workyears | 6,572.0 | 6,979.5 | 5,609.9 | -1,369.6 |

## Goal 3: Rule of Law and Process

**Strategic Goal:** Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law

| Rule of Law and Process | FY 2017 Enacted Budget | FY 2018 Annualized CR | FY 2019 President's Budget | Delta FY 2019 - FY 2018 |
|---|---|---|---|---|
| 3.1 Compliance with the Law | $404,590 | $401,843 | $364,326 | ($37,517) |
| 3.2 Create Consistency and Certainty | $69,370 | $68,898 | $60,366 | ($8,532) |
| 3.3 Prioritize Robust Science | $481,358 | $478,088 | $255,046 | ($223,042) |
| 3.4 Streamline and Modernize | $38,318 | $38,058 | $29,021 | ($9,037) |
| 3.5 Improve Efficiency and Effectiveness | $907,635 | $901,470 | $907,053 | $5,583 |
| **Goal 3 Total** | **$1,901,271** | **$1,888,357** | **$1,615,812** | **($272,545)** |
| **Total Workyears** | **6,979.5** | **6,979.5** | **5,609.9** | **(1,789.4)** |

Note: Totals do not include proposed Agency-wide cancellation of funds.

### Introduction

EPA will seek to reinvigorate the rule of law and process as it administers the environmental laws as Congress intended, and to refocus the Agency on its core statutory obligations. To accomplish this, EPA will work cooperatively with states and tribes to ensure compliance with the law, as well as to create consistency and certainty for the regulated community. Of course, EPA will continue to take civil or criminal enforcement action against violators of environmental laws.

A robust enforcement program is critically important for addressing violations and promoting deterrence, and supports the Agency's mission of protecting human health and the environment. Ensuring compliance with the law also ensures consistency and certainty for the regulated community so the Agency has a complete understanding of the impact of proposed actions on human health, the environment, and the economy, and a clear path and timeline to achieve that compliance. EPA's policies and rules will reflect common sense, consistent with the Agency's statutory authorities, and provide greater regulatory and economic certainty for the public. EPA will enforce the rule of law in a timely manner and take action against those that violate environmental laws to the detriment of human health or the environment.

One of EPA's highest priorities must be to create consistency and certainty for the regulated community. Consistency in how the laws and regulations are applied across the country is part of that process. EPA will undertake a variety of efforts to ensure that consistency in application of laws and regulations is evaluated and addressed, while respecting the unique circumstances of each state and tribe. EPA recognizes the importance of applying rules and policies consistently as well

as creating certainty by meeting the statutory deadlines that are required for EPA's actions. The rule of law must also be built on the application of robust science that is conducted to help the Agency meet its mission and support the states and tribes in achieving their environmental goals. Research, in conjunction with user-friendly applications needed to apply the science to real-world problems, will help move EPA and the states forward in making timely decisions based on sound science.

Carrying out this goal requires that EPA improve the efficiency of its internal business and administrative operations. First, streamlining EPA's business operations, specifically the permitting processes established by the different environmental statutes, is key to ensuring economic growth, human health, and environmental protection. EPA will begin to modernize its permitting practices to increase the timeliness of reviews and decisions, while working more collaboratively, transparently, and cost effectively to achieve the Agency's mission. The second part of improving internal operations includes reducing EPA's overhead and creating more efficient and effective administrative processes (e.g. contracting) that allow EPA to accomplish its core mission work.

## Agency Priority Goals

The budget highlights EPA's FY 2018-2019 Agency Priority Goals that advance EPA priorities and the Agency's FY 2018-2022 Strategic Plan. Two of the six APGs support Goal 3.

- APG-5: Increase environmental law compliance rate. Through September 30, 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits to 21% from a baseline of 24%.

- APG-6: Accelerate permitting-related decisions. By September 30, 2019, EPA will reduce by 50% the number of permitting-related decisions that exceed six months.

## FY 2019 Activities

***Objective 1: Compliance with the Law.*** **Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.**

For decades, the protections mandated by federal environmental laws have been essential to the growth of American prosperity. Noncompliance with those laws diminishes shared prosperity and unfairly tilts the field of economic competition in favor of those that skirt the law. To carry out its mission to protect human health and the environment, EPA, in collaboration with state and tribal partners, relies on a strong national compliance assurance and cleanup enforcement program. An effective enforcement program is key to ensuring that the ambitious goals of the nation's environmental statutes are realized.

In FY 2019, EPA's enforcement priorities remain focused on cleaning up hazardous waste sites and addressing the most significant violations consistent with EPA's statutory authorities. EPA takes the overwhelming majority of its enforcement actions in programs that are: (1) not delegable to a state or tribe; (2) in states or tribes that have not sought authorization to implement a delegable program; or (3) in states or tribes that do not have the resources or expertise, or that seek assistance from the Agency—and these actions are taken in coordination with the states and tribes. For states and tribes with authorized programs, EPA, states, and tribes share enforcement responsibility, with primary enforcement responsibility residing with the state[23] or tribe. Further, EPA is responsible for addressing violations that occur in Indian country in the absence of an approved program.

Even in states or tribes authorized to implement a program, EPA serves a critical role in addressing serious national noncompliance problems, such as those affecting multiple states or tribes, and in serving as a backstop for instances when a state or tribe does not timely or appropriately address serious noncompliance. EPA also may assist a state or tribe in remedying noncompliance problems when the state or tribe is unable to address the problem because it lacks the capability or resources, such as in actions against other federal or state agencies. For some serious violations, the Agency and states or tribes may decide that the best approach is a joint enforcement action. Further, EPA will take immediate action when there is an environmental emergency, such as an oil spill or chemical accident. Through the State Review Framework, EPA periodically reviews authorized state compliance monitoring and enforcement programs, using criteria agreed upon by states, to evaluate performance against national compliance monitoring or enforcement program standards. When states do not achieve standards, the Agency works with them to make progress. However, EPA may also take a lead implementation role when authorized states have a documented history of failure to make progress toward meeting national standards.

In all of its work, EPA's enforcement program strives to address noncompliance in an efficient and timely manner, applying a broad range of enforcement and compliance tools to achieve the goal of reducing noncompliance.

*Civil Enforcement*

The overall goal of EPA's civil enforcement program is to maximize compliance with the nation's environmental laws and regulations to protect human health and the environment. The Agency works closely with the U.S. Department of Justice, states, tribes, territories, and local agencies to ensure consistent and fair enforcement of all major environmental statutes. To that end, the budget includes up to $20 million to be transferred to the Department of Justice for environmental compliance legal support. EPA will seek to strengthen environmental partnerships with its state and tribal partners, encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, and pursue enforcement to deter future violations. EPA requests $143.5 million and 857.1 FTE for the Civil Enforcement program in FY 2019.

[23] See e.g., ECOS Resolution 98-9, U.S. EPA Enforcement in Delegated States (revised September 28, 2016), describing the EPA and state roles in enforcement in authorized states: "WHEREAS, U.S. EPA and the States have bilaterally developed policy agreements which reflect those roles and which recognize the primary responsibility for enforcement action resides with the States, with U.S. EPA taking enforcement action principally where the State requests assistance, is unwilling or unable to take timely and appropriate enforcement actions, or in actions of national interest, or in actions involving multiple state jurisdictions."

EPA recognizes that significant environmental progress has been made over the years, much of it due to enforcement efforts by EPA, states, tribes, and local communities. To maximize compliance, the Agency will refocus efforts toward areas with significant noncompliance issues and where enforcement can address the most substantial impacts to human health and the environment. EPA also recognizes the role of states and tribes as the primary implementers, where authorized by EPA to implement the federal statutes, and will focus compliance assurance and enforcement resources on direct implementation responsibilities, addressing the most significant violations, and assisting authorized states and tribes in meeting national standards. Providing this compliance assistance helps to ensure a level playing field. EPA is responsible for direct implementation for programs that are not delegable or where a state or tribe has not sought or obtained the authority to implement a particular program (or program component). Examples of non-delegable programs include the CAA mobile source program, pesticide labeling and registration under FIFRA, virtually all compliance assurance and enforcement in Indian country, and enforcement of the federal Superfund cleanup program. Additionally, the enforcement of portions of various other laws, including RCRA, the CWA, and stratospheric ozone under the CAA are non-delegable. EPA also will pursue enforcement actions at federal facilities where significant violations are discovered; will ensure that federal facilities are held to the same standards as the private sector; and will provide technical and scientific support to states and tribes with authorized programs.

*Criminal Enforcement*

In FY 2019, EPA requests $48.2 million to support the Criminal Enforcement program. EPA's Criminal Enforcement program enforces the nation's environmental laws through targeted investigation of criminal conduct committed by individual and corporate defendants that threaten public health and the environment. EPA will collaborate and coordinate with the U.S. Department of Justice and state, tribal, and local law enforcement counterparts to ensure that the Agency responds to violations as quickly and effectively as possible. EPA enforces the nation's environmental laws through targeted investigation of criminal conduct committed by individual and corporate defendants that threatens human health and the environment. The Agency plays a critical role across the country since states and tribes have limited capacity to prosecute environmental crimes. The Agency will focus resources on the most egregious environmental cases (i.e., those presenting significant human health and environmental impacts).

*Cleanup Enforcement*

Through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund), EPA will facilitate prompt site cleanup and use an "enforcement first" approach that maximizes the participation of liable and viable parties in performing and paying for cleanups. The Agency will protect communities by ensuring that potentially responsible parties (PRPs) conduct cleanups at Superfund sites, preserving federal taxpayer dollars for sites where there are no viable contributing parties, and by recovering costs if the EPA expends Superfund-appropriated dollars to clean up sites. EPA also will address liability concerns that can be a barrier to potential reuse. Addressing the risks posed by Superfund sites and returning them to productive use strengthens the economy and spurs economic growth. In FY 2017, EPA reached a settlement or took an enforcement action at 100 percent of non-federally owned Superfund sites with viable, liable parties before the start of an FY 2017 remedial action. In FY 2017, the Superfund

Enforcement program also secured private party commitments exceeding $1.46 billion, a 27 percent increase from FY 2016.

In FY 2019, EPA will focus its resources on the highest priority sites, particularly those that may present an immediate risk to human health or the environment. In accordance with the Superfund Task Force recommendations, the Agency will improve and revitalize the Superfund program to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial reuse as expeditiously as possible. At federally-owned sites, EPA also will focus on resolving formal disputes under the federal facility agreements. In FY 2019, EPA requests $150.5 million and 745.3 FTE to fund the Superfund Enforcement program and $6.0 million to fund the Federal Facilities Enforcement program.

***Objective 2: Create Consistency and Certainty.*** **Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.**

The regulatory framework is inherently dynamic. As part of its statutory obligations, EPA is required to publish many regulations within a set timeframe each year that implement environmental programs and assist the Agency in meeting its core mission. These regulations address newly mandated responsibilities as well as updates and revisions to existing regulations. As EPA meets its obligations to protect human health and the environment through regulatory action, it must also meet another key responsibility – minimizing "regulatory uncertainty" that unnecessarily causes businesses and communities to face delays, planning inefficiencies, and compliance complexities that impede environmental protection, economic growth, and development. EPA will employ a set of strategies to reduce regulatory uncertainty while continuing to improve human health and environmental outcomes consistent with the Agency's authorities as established by Congress and while considering unique state, tribal, and local circumstances. These strategies, which reflect EPA's commitment to cooperative federalism and commitment to the rule of law, also will help advance Agency goals for streamlining and modernizing permitting and enhancing shared accountability. In total, EPA requests $60.4 million in resources to support this objective.

As EPA issues new or revised regulations, businesses and individuals can find it challenging to know which rules apply to them and to adjust their compliance strategies. EPA will reinvigorate its approach to regulatory development and prioritize meeting its statutory deadlines to ensure that expectations for the regulated community and the public are clear and comprehensive and that Agency actions are defensible and consistent with its authorities. The Agency will use new approaches and flexible tools to minimize regulatory uncertainty and will communicate more comprehensively to realize more consistent and better environmental outcomes, while centering work on statutory and regulatory obligations. EPA will strengthen working relationships with industry sectors to better understand their needs and challenges in implementing Agency requirements and with communities to understand their concerns. This knowledge will enable the Agency to develop better policies and regulations to protect human health and the environment in line with the authorities given to EPA by Congress.

In addition, EPA will develop and engage stakeholders in reviewing a draft base catalog of responsibilities that statutes require EPA to perform in programs delegated to states and tribes. In

FY 2019, EPA will complete a base catalog and subsequently update as necessary. This will provide EPA a foundation to make decisions that reduce contradictory policy determinations at headquarters and across regions. It also will support EPA cooperative federalism commitments aimed at minimizing duplication and overlap among regions, headquarters, states, and tribes. This effort also leverages another commitment that EPA is making under cooperative federalism—to identify for all environmental media an inventory and timeline for state-led permits that EPA reviews.

The Agency will establish a national network to ensure consistent implementation of policy across all regions. EPA will review regulatory guidance documents to identify key opportunities and will clarify and realign Agency approaches to improve consistency and clarity. EPA will strengthen working relationships with states, tribes, and local communities to transfer knowledge, leveraging its commitments under cooperative federalism, such as the collaboration under E-Enterprise for the Environment. EPA will make available to states and tribes tools or services designed by other federal agencies, states, tribes, or local communities that enhance efficiency, reduce burden on the regulated community, while ensuring protection of human health and the environment.

***Objective 3: Prioritize Robust Science.*** **Refocus the EPA's robust research and scientific analysis to inform policy making.**

EPA will identify, assess, conduct, and apply the best available science to address current and future environmental hazards, develop new approaches, and improve the scientific foundation for environmental protection decisions. EPA conducts problem-driven, interdisciplinary research to address specific environmental risks, and is committed to using science and innovation to reduce risks to human health and the environment, based on needs identified by EPA's program and regional offices as well as state and tribal partners. Specifically, the Agency will strengthen alignment of its research to support EPA programs, regions, states, and tribes in accomplishing their top human health and environmental protection priorities for improved air quality, clean and safe water, revitalized land, and chemical safety. Working closely with ECOS and its subsidiary, the Environmental Research Institute of the States (ERIS), the Agency will strive to connect state research needs with Agency priorities, and work to improve communication of research results. Through the public-private coalition Interstate Technology and Regulatory Council[24], EPA will encourage the adoption of innovative technologies and solutions. The Agency also will emphasize the translation of its work products for end user application and feedback.

EPA research will be reviewed by various scientific advisory boards (e.g. Board of Scientific Counselors) that are made up of recognized experts in various scientific, engineering, and social science fields and may be from industry; business; public and private research institutes or organizations; academia; federal, state, tribal, and local governments; nongovernmental organizations; and other relevant interest areas. The Agency recently issued a directive to ensure that the composition of EPA's science committees is based on integrity, diverse geographic makeup, and independence.

[24] For more information on the Interstate Technology and Regulatory Council, go to http://www.itrcweb.org/.

*Air Quality*

EPA's research will advance the science and provide the information critical to improve air quality and to inform stationary source regulations; vehicle and fuel standards and certification; emission inventories; air quality assessments; and domestic ozone actions. The results of agency research to support air quality program priorities will inform EPA programs; state, tribal, and local air programs; communities; and individuals about measures and strategies to reduce air pollution. Researchers will publish peer-reviewed scientific journal articles to disseminate research findings as appropriate and consistent with resource and program needs. Recently, EPA's research led to the development of a Wildfire Smoke Guide[25] for public health officials, as well as an innovative Smoke Sense mobile application[26] for those impacted by wildfires. EPA requests $30.7 million in FY 2019 to conduct air quality research.

*Safe and Sustainable Water Resources*

EPA will develop innovative, cost-effective solutions to current, emerging, and long-term water resource challenges for complex chemical and biological contaminants. Using a systems approach to develop scientific and technological solutions for protecting human health and aquatic ecosystems, EPA researchers partner with program experts; federal and state agencies; tribes; local communities; academia; nongovernmental organizations; and private stakeholders. For example, EPA's researchers are developing laboratory analytical methods, evaluating chemical toxicity, identifying and estimating human exposure to per- and polyfluoroalkyl substances (PFAS), identifying drinking water treatment technologies and providing technical support to EPA regions and states to provide data that can be used to make informed decisions about managing PFAS. In FY 2019, EPA requests $67.3 million for research into Safe and Sustainable Water Resources.

*Sustainable and Healthy Communities*

EPA requests $64.3 million in FY 2019 to support the Sustainable and Healthy Communities Research Program. EPA will conduct research to support regulatory activities and protocol development for the National Oil and Hazardous Substances Pollution Contingency Plan and provide on-demand technical support at cleanup sites managed by federal, state or tribal governments, as well as assistance during emergencies. The Agency conducts health, environmental engineering, and ecological research and prepares planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes.

*Chemical Safety*

EPA's Chemical Safety Research program will evaluate and predict impacts from chemical use and disposal and provide states and tribes with information, tools, and methods to make better informed, more timely decisions about the thousands of chemicals in the United States. EPA requests $61.7 million for FY 2019, to produce innovative tools that accelerate the pace of data-driven evaluations, enable knowledge-based decisions that protect human health, and advance the science required to anticipate and solve problems. For example, the new version of the Chemistry Dashboard[27], released in August 2017, includes new lists of toxins, increased amounts of toxicity value data, enhanced performance of searches, and millions of new predicted data points from the

[25] https://www3.epa.gov/airnow/wildfire_may2016.pdf
[26] https://www3.epa.gov/air-research/smoke-sense
[27] Interactive Chemistry Dashboard accessible here: https://comptox.epa.gov/dashboard/

Toxicity Estimation Software Tool (TEST). The Chemistry Dashboard provides a one-stop-shop for chemical properties, structure, exposure, and toxicity information that inform chemical exposure and risk evaluations and assessments by the Agency and outside researchers.

*Human Health Risk Assessment*
EPA also will focus on the science of assessments that inform agency, state, and tribal decisions and policies. These risk assessments provide the research and technical support needed to ensure safety of chemicals in the marketplace, revitalize and return land to communities, provide clean and safe water, and work with states and tribes to improve air quality. EPA's risk assessments will be used to inform national standards, clean-up levels at local sites, and set advisory levels. EPA requests $27.3 million in FY 2019 to support the Human Health Risk Assessment Research Program.

***Objective 4: Streamline and Modernize.*** **Issue permits more quickly and modernize our permitting and reporting systems.**

EPA implements a host of environmental statutes that affect the regulated community. Permitting requirements under these statutes can impose a variety of costs, including direct costs and opportunity costs related to uncertainty, delay, and cancellation. Delays in the review of permits and modifications by federal, state, or tribal permitting authorities can postpone or prevent manufacturers from building, expanding, or beginning operations, even if the affected operations ultimately may be deemed suitable as proposed. Delays can also impact construction of major infrastructure projects. EPA is committed to speeding up reviews of permits and modifications to create certainty for the business community, leading to more jobs, increased economic prosperity, and streamlined permit renewals, which incorporate up-to-date information and requirements more quickly, thereby improving environmental protection. Further, EPA will continue to work toward converting permit applications and reports that rely on paper submissions to electronic processing in order to reduce burden, shorten the wait for decisions, and increase the opportunity for public transparency. To implement this objective, EPA requests a total of $29.0 million in FY 2019.

EPA will systematically collect and report permitting data for each of its permitting programs. The Agency also will employ business process improvement strategies, such as Lean, to improve efficiencies in all permitting processes and meet our commitments. The Agency also will work with states and use Lean techniques to streamline the review of state-issued permits. Solutions may include conducting earlier triage and communications, conducting Agency reviews in parallel with public reviews, and/or focusing reviews where they add the most value.

EPA also will consider where policy changes can improve permitting efficiency without sacrificing environmental results. Examples include expanding the scope of minor permit modifications to reduce the number of permit reviews required, reinvigorating the use of plant-wide applicability limits (PALs) to reduce unnecessary permitting transactions, and increasing states' ability to incorporate federal regulations by reference, enabling them to adjust quickly and efficiently to new regulatory provisions.

EPA will modernize permitting and reporting processes through efforts such as E-Enterprise for the Environment, a shared governance model with EPA, states, and tribes. EPA will work with

states and tribes to achieve this objective without overburdening those entities with costly unnecessary reporting systems and technology.

***Objective 5: Improve Efficiency and Effectiveness.*** **Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.**

To support its mission to protect human health and the environment, EPA will improve the efficiency and effectiveness of its business processes. Focus areas will include financial, facility, human resource, contract, grant, and information technology (IT)/information management (IM). These enhancements will improve EPA's future workforce, modernize and streamline its business practices, and take advantage of new collaborative and cost-effective tools and technologies. The Agency will build a modern and secure work environment that will protect critical information and support its efforts to address the environmental problems of the 21st century. EPA will work to alleviate challenges associated with outdated or non-existent policies, tension between centralized and decentralized approaches, myriad federal acquisition and grants requirements, complex processes, and varying levels of expertise across Agency programs. To support this objective, EPA requests a total of $907.1 million and 2,222.5 FTE in FY 2019.

EPA will modernize and improve business processes and operations to promote transparency, efficiency, and effectiveness; enhance collaborative, results-driven partnerships with internal and external business partners; recruit, develop, and maintain a highly-skilled, diverse, and engaged workforce; and improve the capabilities and cost-effectiveness of its IT and IM systems.

EPA will apply Lean principles and will leverage input from customer-focused councils, advisory groups, surveys, workgroups, acquisition partnership initiatives, technical user groups, portfolio reviews, and federal advisory committees to identify business process streamlining opportunities. To improve the efficiency and cost effectiveness of its operations, EPA will standardize and streamline internal business processes in its acquisition and grants processes and systems, and use additional federal and/or internal shared services. When EPA has applied Lean to processes across the Agency, process times were reduced by 50 percent on average.

EPA will ensure its workforce is positioned to accomplish the Agency's mission effectively by providing access to quality training and development opportunities that will improve staff's and managers' skills, knowledge, and performance, and prepare them to capitalize on opportunities that advance progress. EPA will improve its workforce planning and management, strengthen its Senior Executive Service, and focus on developing and maintaining a highly-skilled technical workforce.

EPA also will work to transform and modernize its information systems, tools, and processes to improve how the Agency collaborates both internally and with external stakeholders. EPA will enhance the power of information by delivering on-demand data to the right people at the right time. To enable the Agency, its partners, and the public effectively to acquire, generate, manage, use, and share information – a critical resource in protecting human health and the environment – EPA will improve its IT/IM capabilities and customer experiences. EPA will employ enterprise risk management and financial data analytics to support data management decision making, using the enterprise risk management framework mandated by OMB Circular A-123.

To ensure that critical environmental and human health information is adequately protected, EPA will strengthen its cybersecurity posture. The Agency will focus on implementing two key cybersecurity priorities—the mandated federal-government-wide Continuous Diagnostics and Mitigation (CDM) effort, and the complementary EPA-specific Cyber Risk Mitigation Projects (CRMPs). These two priorities introduce or improve upon dozens of cybersecurity capabilities, enhance the Agency's ability to respond to threats, and improve EPA's privacy posture via the Privacy Act of 1974. EPA will work closely with the Department of Homeland Security and other partners in implementing CDM capabilities.

To better understand complex interactions between pollutants and the environment and address the environmental problems of the 21st century effectively and efficiently, EPA and its partners analyze large volumes of data. EPA will develop a comprehensive data management strategy that addresses the collection, management, and use of data generated both internally and from external partners including states, tribes, grantees, the regulated community, and citizen science. The Agency will deploy new data analysis, data visualization, and geospatial tools in a Cloud-based framework to enable analysis and provide the basis for informed decision making.

Environmental decision making across media programs requires access to high-quality data and analytics. EPA will build shared IT services, maximizing the benefits of our investments and ensuring consistency and scalability in tools and services. EPA programs that receive submissions from outside the Agency, whether from the reporting community, states, tribes, or local governments, will rely increasingly on centrally-developed and maintained information services, decreasing the volume of computer code each program must develop and maintain. Shared services will reduce reporting burden for submitting entities and improve data quality for EPA. EPA programs, states, and tribes must establish a common catalog of shared services and agree to a minimum set of common standards and practices.

The Agency will enhance its extensive information resources by designing an enterprise-wide information architecture that will facilitate the electronic management of data and information, as well as multimodal access, effective searching, and ease of use. The Agency's future information management architecture will support official recordkeeping requirements, as well as daily document management, business processes, information access, and legal needs of EPA employees and organizations, while also being flexible, scalable, and cost effective.

**Environmental Protection Agency**
**2019 Annual Performance Plan and Congressional Justification**

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## APPROPRIATION: Science & Technology

### Resource Summary Table
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Science & Technology** | | | | |
| Budget Authority | $723,576.4 | $708,975.0 | $448,965.0 | -$260,010.0 |
| Total Workyears | 2,137.0 | 2,199.7 | 1,492.4 | -707.3 |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

### Bill Language: Science and Technology

*For science and technology, including research and development activities, which shall include research and development activities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980; necessary expenses for personnel and related costs and travel expenses; procurement of laboratory equipment and supplies; and other operating expenses in support of research and development, $448,965,000, to remain available until September 30, 2020.*

### Program Projects in S&T
(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Clean Air | | | | |
| Clean Air Allowance Trading Programs | $6,045.0 | $7,518.0 | $5,739.0 | -$1,779.0 |
| Atmospheric Protection Program | $7,050.8 | $7,964.0 | $0.0 | -$7,964.0 |
| Federal Support for Air Quality Management | $7,283.8 | $7,280.0 | $4,031.0 | -$3,249.0 |
| Federal Vehicle and Fuels Standards and Certification | $98,177.0 | $92,988.0 | $75,135.0 | -$17,853.0 |
| Subtotal, Clean Air | $118,556.6 | $115,750.0 | $84,905.0 | -$30,845.0 |
| Indoor Air and Radiation | | | | |
| Indoor Air: Radon Program | $145.0 | $158.0 | $0.0 | -$158.0 |
| Radiation: Protection | $2,328.6 | $1,996.0 | $1,000.0 | -$996.0 |
| Radiation: Response Preparedness | $3,785.0 | $3,658.0 | $3,666.0 | $8.0 |
| Reduce Risks from Indoor Air | $253.3 | $144.0 | $0.0 | -$144.0 |
| Subtotal, Indoor Air and Radiation | $6,511.9 | $5,956.0 | $4,666.0 | -$1,290.0 |
| Enforcement | | | | |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Forensics Support | $13,228.8 | $13,576.0 | $10,486.0 | -$3,090.0 |
| Homeland Security | | | | |
| Homeland Security: Critical Infrastructure Protection | $9,950.4 | $9,153.0 | $5,216.0 | -$3,937.0 |
| Homeland Security: Preparedness, Response, and Recovery | $23,161.0 | $23,298.0 | $22,461.0 | -$837.0 |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $438.0 | $446.0 | $500.0 | $54.0 |
| Subtotal, Homeland Security | $33,549.4 | $32,897.0 | $28,177.0 | -$4,720.0 |
| IT / Data Management / Security | | | | |
| IT / Data Management | $3,342.0 | $3,068.0 | $2,725.0 | -$343.0 |
| Operations and Administration | | | | |
| Facilities Infrastructure and Operations | $64,642.7 | $67,875.0 | $68,834.0 | $959.0 |
| Workforce Reshaping | $.0 | $.0 | $5,994.0 | $5,994.0 |
| Subtotal, Operations and Administration | $64,642.7 | $67,875.0 | $74,828.0 | $6,953.0 |
| Pesticides Licensing | | | | |
| Pesticides: Protect Human Health from Pesticide Risk | $2,938.3 | $3,090.0 | $2,406.0 | -$684.0 |
| Pesticides: Protect the Environment from Pesticide Risk | $2,046.2 | $2,325.0 | $2,122.0 | -$203.0 |
| Pesticides: Realize the Value of Pesticide Availability | $548.1 | $571.0 | $530.0 | -$41.0 |
| Subtotal, Pesticides Licensing | $5,532.6 | $5,986.0 | $5,058.0 | -$928.0 |
| Research: Air and Energy | | | | |
| Research: Air and Energy | $90,076.2 | $91,282.0 | $30,711.0 | -$60,571.0 |
| Research: Safe and Sustainable Water Resources | | | | |
| Research: Safe and Sustainable Water Resources | $104,687.6 | $105,535.0 | $67,261.0 | -$38,274.0 |
| Research: Sustainable Communities | | | | |
| Research: Sustainable and Healthy Communities | $142,429.1 | $133,415.0 | $52,549.0 | -$80,866.0 |
| Research: Chemical Safety and Sustainability | | | | |
| Human Health Risk Assessment | $40,506.5 | $37,554.0 | $22,267.0 | -$15,287.0 |
| Research: Chemical Safety and Sustainability | | | | |
| *Endocrine Disruptors* | $15,497.0 | $16,142.0 | $10,006.0 | -$6,136.0 |
| *Computational Toxicology* | $21,790.5 | $21,266.0 | $17,213.0 | -$4,053.0 |
| *Research: Chemical Safety and Sustainability (other activities)* | $51,905.1 | $51,106.0 | $34,518.0 | -$16,588.0 |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Subtotal, Research: Chemical Safety and Sustainability | $89,192.6 | $88,514.0 | $61,737.0 | -$26,777.0 |
| Subtotal, Research: Chemical Safety and Sustainability | $129,699.1 | $126,068.0 | $84,004.0 | -$42,064.0 |
| Water: Human Health Protection | | | | |
| Drinking Water Programs | $3,517.0 | $3,495.0 | $3,595.0 | $100.0 |
| Congressional Priorities | | | | |
| Water Quality Research and Support Grants | $7,803.4 | $4,072.0 | $0.0 | -$4,072.0 |
| **TOTAL S&T** | **$723,576.4** | **$708,975.0** | **$448,965.0** | **-$260,010.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Clean Air

**Clean Air Allowance Trading Programs**
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $15,236.6 | $16,060.0 | $12,574.0 | -$3,486.0 |
| ***Science & Technology*** | ***$6,045.0*** | ***$7,518.0*** | ***$5,739.0*** | ***-$1,779.0*** |
| Total Budget Authority | $21,281.6 | $23,578.0 | $18,313.0 | -$5,265.0 |
| Total Workyears | 68.4 | 71.4 | 63.7 | -7.7 |

## Program Project Description:

This program is responsible for managing the Clean Air Status and Trends Network (CASTNET), a long-term ambient monitoring network, established under Title IX of the Clean Air Act (CAA) Amendments of 1990, which serves as the nation's primary source for atmospheric data on the dry component of acid deposition, regional ground-level ozone, and other forms of particulate and gaseous air pollution. Used in conjunction with the National Atmospheric Deposition Program's (NADP) wet deposition networks and other ambient air quality networks, CASTNET's long-term datasets and data products are used to determine the effectiveness of national and regional emission control programs. The CASTNET program provides spatial and temporal trends in ambient air quality and atmospheric deposition in non-urban areas and sensitive ecosystems (i.e., National Parks). Maintaining the CASTNET monitoring network continues to be critical for assessing the environmental benefits realized from the Acid Rain Program and regional programs that control transported emissions (thereby reducing secondary pollutant formation of ozone and fine particles).

EPA's Long-Term Monitoring (LTM) program was created to assess the health of water bodies in response to changes in deposition of atmospheric pollutants. Today, it ensures that the Clean Air Act continues to be effective in reducing the impact of atmospheric pollutants (e.g., strong acid anions) on surface waters in New England, the Adirondack Mountains, the Northern Appalachian Plateau (including the Catskill and Pocono mountains), and the Blue Ridge region. This program is operated cooperatively with partners in state agencies, academic institutions, and other federal agencies. The LTM surface water chemistry monitoring program provides field measurements for understanding biogeochemical changes in sulfur, nitrogen, acid neutralizing capacity (ANC), aluminum, and carbon in streams and lakes in relation to changing pollutant emissions. The LTM program is one of the longest running programs at EPA, providing a longitudinal dataset based on sampling and measurements that go back to 1983.

Clean Air Allowance Trading Programs, established under Title I and IV of the Clean Air Act, help implement the National Ambient Air Quality Standards (NAAQS) and the Acid Rain Program, as well as reduce toxics emissions and regional haze. Pollutants reduced include sulfur

dioxide ($SO_2$), nitrogen oxides ($NO_x$), ground-level ozone, fine particulate matter ($PM_{2.5}$), and mercury. EPA provides assistance to states as they develop, implement, and assess their state and regional programs to address major regional and national air issues from large stationary sources. This assistance has traditionally come in the form of technical analysis, modeling, and emissions monitoring support.

The Cross-State Air Pollution Rule (CSAPR) requires 27 states to limit their state-wide emissions of SO2 and/or NOx in order to reduce or eliminate the states' contributions to fine particulate matter and/or ground-level ozone pollution in other states. The emissions limitations are defined in terms of maximum state-wide "budgets" for emissions of annual $SO_2$, annual NOx, and/or ozone-season NOx from each state's large electric generating units (EGUs). In September 2016, EPA finalized an update to CSAPR for the 2008 ozone NAAQS.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will:

- Continue quality assurance, analysis, and reporting of environmental data from the CASTNET deposition/rural ozone and LTM surface water monitoring networks.

- Analyze and assess trends in sulfur and nitrogen deposition, rural ozone concentrations, surface water quality, and other indicators of ecosystem health and ambient air quality in non-urban areas of the U.S.

- Assure the continuation of ongoing $SO_2$ and $NO_X$ emission reductions from power plants in the eastern half of the U.S. by implementing CSAPR and the CSAPR update, and across the contiguous U.S. by implementing the Acid Rain Program.[1]

- Ensure accurate and consistent results for the clean air and allowance trading programs. Work will continue on performance specifications and investigating monitoring alternatives and methods to improve the efficiency of monitor certification and emissions data reporting.

- Work with states to implement emission reduction programs to comply with CAA Section 110(a)(2)(D)(i)(I) requirements.[2]

**Performance Measure Targets:**

| **(NOX) Ozone Season emissions of nitrogen oxides (NOx) from electric power generation sources (tons).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 590,000 | 580,000 |

[1] Clean Air Act §§ 110(a)(2)(D) and 401
[2] For more information on program performance, see http://www.epa.gov/airmarket/progress/progress-reports.html.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,779.0) This program change reduces support for the program with impacts to the following activities in FY 2019: technical analysis, modeling, and emissions monitoring support to states as they develop, implement, and assess their state and regional programs to address regional and national air issues from large stationary sources, and discontinued reanalysis including enhancement of current EPA IT systems related to multi-state air emissions electronic reporting, monitor certification, and compliance determination.

**Statutory Authority:**

Clean Air Act.

**Federal Support for Air Quality Management**

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $127,113.4 | $125,387.0 | $96,097.0 | -$29,290.0 |
| ***Science & Technology*** | ***$7,283.8*** | ***$7,280.0*** | ***$4,031.0*** | ***-$3,249.0*** |
| Total Budget Authority | $134,397.2 | $132,667.0 | $100,128.0 | -$32,539.0 |
| Total Workyears | 812.6 | 842.0 | 601.8 | -240.2 |

## Program Project Description:

Federal support for the criteria pollutant and air toxics programs includes a variety of tools to characterize ambient air quality and the level of risk to the public from air pollutants and to measure national progress toward improving air quality and reducing associated risks. The Federal Support for Air Quality Management program supports development of State Implementation Plans (SIPs) through modeling and other tools and assists states in implementing, attaining, maintaining, and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The program also develops and provides information, training, and tools to assist state, tribal, and local agencies, as well as communities, to reduce air toxics emissions and risk specific to their local areas. Finally, the program includes activities related to the Clean Air Act's stationary source residual risk and technology review program, which involves an assessment of source categories subject to Maximum Achievable Control Technology (MACT) standards to determine if more stringent standards are needed to further reduce the risks to public health and to determine if the MACT standards should be revised to reflect developments in practices, processes, and control technologies.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. As part of implementing key activities in support of attainment of the NAAQS, EPA will provide states and local air quality agencies with assistance in developing SIPs during FY 2019. EPA also will help states in conducting their SIP demonstrations by providing models, modeling inputs and tools, and technical guidance, identifying the control options available and providing priority guidance to assist them in working toward attaining the NAAQS. EPA will ensure national consistency in how air quality modeling is conducted as part of regulatory decision-making, including federal and state permitting programs as well as how conformity determinations are conducted across the U.S. The Agency will work with states and local air quality agencies to ensure that particulate matter (PM) hot-spot analyses are conducted in a manner consistent with the transportation conformity regulation and guidance.

One of EPA's top priorities is to fulfill its Clean Air Act (CAA) and court-ordered obligations. Section 112 of the CAA requires that the emissions control bases for all MACT standards be reviewed and updated, as necessary, every eight years. In FY 2019, EPA will continue to conduct risk assessments to determine whether the MACT rules appropriately protect public health. The program will prioritize its work with an emphasis on meeting court-ordered deadlines.

EPA is working with other internal and external stakeholders on improving monitoring systems to fill data gaps and get a better estimate of actual population exposure to toxic air pollution. EPA will continue to provide quality assurance proficiency testing for federal and commercial laboratories that produce data from $PM_{2.5}$ air monitoring systems to ensure quality data for use in determining air quality.

In FY 2019, EPA will work with partners to continue improving emission factors and inventories, including the National Emissions Inventory. This effort includes gathering improved activity data from monitoring equipment and using geographic information systems and satellite remote sensing, where possible, for key point, area, mobile, and fugitive sources, and global emission events.

**Performance Measure Targets:**

Work under this program supports performance results in the Federal Support for Air Quality Management program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$523.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$3,772.0/ -3.1 FTE) This program change reflects a reduction to EPA's support of state, tribal, and local agencies for SIP/TIP development as well as activities to reduce air toxic emissions and risks in communities.

**Statutory Authority:**

Clean Air Act.

**Federal Vehicle and Fuels Standards and Certification**

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$98,177.0*** | ***$92,988.0*** | ***$75,135.0*** | ***-$17,853.0*** |
| Total Budget Authority | $98,177.0 | $92,988.0 | $75,135.0 | -$17,853.0 |
| Total Workyears | 308.2 | 308.5 | 296.7 | -11.8 |

**Program Project Description:**

Under the Federal Vehicle and Fuels Standards and Certification program, EPA develops, implements, and ensures compliance with national emission standards to reduce mobile source related air pollution from light-duty cars and trucks, heavy-duty trucks and buses, nonroad engines and vehicles, and from the fuels that power these engines. The program also evaluates new emission control technology and provides state, tribal, and local air quality managers and transportation planners with access to information on transportation programs and incentive-based programs. As part of ensuring compliance with national emission standards, the program tests vehicles, engines, and fuels, and establishes test procedures for federal emissions and fuel economy standards.

The National Vehicle and Fuel Emissions Laboratory (NVFEL) ensures air quality benefits and fair competition in the marketplace by conducting testing operations on motor vehicles, heavy-duty engines, nonroad engines, and fuels to certify that all vehicles, engines, and fuels that enter the U.S. market comply with all federal clean air and fuel economy standards. The NVFEL conducts vehicle emission tests as part of pre-production tests, certification audits, in-use assessments, and recall programs to ensure compliance with mobile source clean air programs.

EPA works with states and local governments to ensure the technical integrity of the mobile source control emission benefits included in State Implementation Plans (SIPs) and transportation conformity determinations. EPA develops and provides information and tools to assist state, local, and tribal agencies, as well as communities, to reduce air toxics emissions and risks specific to their local areas. Reductions in emissions of mobile source air toxics, such as components of diesel exhaust, are achieved through establishing national emissions standards and partnership approaches working with state, local, and tribal governments, as well as a variety of stakeholder groups.

EPA administers the Renewable Fuel Standard (RFS) program. RFS was created under the Energy Policy Act of 2005 (EPAct), which amended the Clean Air Act (CAA), and was expanded under the Energy Independence and Security Act of 2007 (EISA). The RFS program requires a certain

volume of renewable fuel to replace or reduce the quantity of petroleum-based transportation fuel, heating oil or jet fuel.

The four renewable fuel categories under the RFS are biomass-based diesel, cellulosic biofuel, advanced biofuel, and total renewable fuel. Obligated parties under the RFS program are refiners or importers of gasoline or diesel fuel. Compliance is achieved by blending renewable fuels into transportation fuel, or by obtaining credits (called "Renewable Identification Numbers," or RINs) to meet an EPA-specified Renewable Volume Obligation (RVO).

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. The Federal Vehicle and Fuels Standards and Certification program supports the Agency's integrated criteria pollutant and greenhouse gas (GHG) compliance programs by operating test cells that simultaneously measure criteria pollutants and GHG emissions, reviewing certification applications for light-duty vehicles and heavy-duty engines to approve applications for both the criteria pollutant and GHG programs, and examining potential violations.

In FY 2019, the Federal Vehicle and Fuels Standards and Certification program will continue to focus its efforts on certification decisions. The Agency will continue to perform its compliance oversight functions on priority matters. In FY 2019, the Agency also will conduct compliance oversight tests where there is evidence to suggest noncompliance. EPA will continue to conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars.

In FY 2019, EPA anticipates reviewing and approving about 5,275 vehicle and engine emissions certification requests, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. There has been a significant increase in demand for EPA's certification services over the last two decades, due in part to the addition of certification requirements for marine, other nonroad, and small spark-ignited engines.

EPA uses in-use emissions data provided by light-duty vehicle manufacturers as a means to measure compliance and determine if any follow-up evaluation or testing is necessary. Since calendar year 2000, light-duty vehicle manufacturers have been required, by regulation, to test a number of newer and older in-use vehicles and provide the data to EPA. The Agency receives over 2,100 test results annually. EPA reviews the data and determines if there are any specific vehicles, models, or manufacturers that are failing emissions in-use. EPA will use this information submitted by light-duty manufacturers to determine if there are vehicle models that should be identified for testing for the upcoming model year prior to granting the manufacturer a certificate of conformity which allows the manufacturer to sell vehicles in the U.S.

In FY 2019, EPA will continue to implement the harmonized fuel economy and existing GHG emission standards for light-duty vehicles and heavy-duty vehicles which provide regulatory certainty to the marketplace and spur innovation in vehicle technology. These standards were finalized by EPA in coordination with the National Highway Traffic Safety Administration

(NHTSA) and EPA is responsible for implementing both the emission standards and significant aspects of the fuel economy standards.

In FY 2019, EPA also will oversee compliance with vehicle fuel economy labeling requirements. In past years, EPA conducted in-use audits of manufacturer "coast-down" data revealing issues in manufacturer data submitted to EPA and, as a result, inaccurate fuel economy labels on more than a million vehicles from several well-known manufacturers.

In FY 2019, EPA will continue implementing the Tier 3 standards for light-duty vehicles and certifying manufacturers' fleets for vehicle Model Year 2020. EPA is responsible for establishing the test procedures needed to measure tailpipe emissions and for verifying manufacturers' vehicle fuel economy data; as a result, the Agency will deploy its laboratory testing resources to ensure that new cars and trucks are in compliance with the Tier 3 emissions standards.

On March 15, 2017, EPA and the Department of Transportation announced that EPA intends to reconsider the Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle GHG Emissions Standards, issued on January 12, 2017. Consistent with the original schedule, in 2018, EPA intends to make a new Final Determination regarding the appropriateness of the standards. If the Administrator's Final Determination is that the model year 2022-2025 standards or program should be modified, EPA will make any modifications to the existing rule through a notice-and-comment rulemaking, including the issuing of a Notice of Proposed Rulemaking and a Final Rulemaking.

EPA will continue working with the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) on programs to control conventional pollutant emissions from marine and aircraft engines, respectively. In FY 2019, EPA will work with ICAO on its program to develop international action plans to reduce particulate matter (PM) emissions from international civil aviation.

The Motor Vehicle Emissions Simulator (MOVES) is the Agency's emission modeling system that estimates emissions for mobile sources at the national, county, and project level for criteria air pollutants, greenhouse gases, and air toxics. In FY 2019, MOVES will support the Agency's emission control programs, as well as provide critical support to states in their determination of program needs to meet air quality standards. The Agency also will evaluate the schedule for updates to MOVES.

In FY 2019, EPA will continue to provide state and local governments with assistance in developing SIPs and providing assistance with transportation conformity determinations. EPA will continue to work with states and local governments to ensure the technical integrity of the mobile source emission estimates in their SIPs. EPA will assist in identifying control options available and provide guidance, as needed. In addition, EPA will ensure national consistency in how conformity determinations are conducted across the U.S. and in the development of motor vehicle emissions budgets in air quality plans, for use in conformity determinations.

EPA will continue to provide assistance to state and local transportation and air quality agencies working on $PM_{2.5}$ hot-spot analyses. This will help ensure that analyses use the latest available information and that a measure of consistency exists across the nation. Additionally,

EPA will continue partnering with states to support inspection and maintenance (I/M) programs that focus on in-use vehicles and engines. Basic and/or enhanced I/M testing is currently being conducted in over 30 states with technical and programmatic guidance from EPA.

In FY 2019, EPA will continue to work with a broad range of stakeholders to develop targeted, sector-based, and place-based incentives for diesel fleets (including school buses, ports, and freight) to limit emissions from older, pre-2007 diesel engines not subject to stringent emissions standards. Because large numbers of people live near ports and are vulnerable to mobile source diesel emissions, EPA will focus its efforts on reducing mobile source emissions in and around ports. Approximately 39 million people in the U.S. currently live in close proximity to ports and can be exposed to air pollution associated with emissions from diesel engines at ports, including particulate matter, nitrogen oxides, ozone, and air toxics.[3] EPA will focus its efforts on reducing mobile source emissions in and around ports. EPA also is working with industry to bring about field testing and emissions testing protocols for a variety of innovative energy-efficient, emissions reducing technologies for the legacy fleet.

EPA will continue to implement the RFS program and to carry out actions required by the EPAct of 2005 and the EISA of 2007, including operating and maintaining the credit trading systems. EISA expanded the renewable fuels provisions of EPAct and requires additional studies in various areas of renewable fuel use. EISA requires that EPA set an annual volume standard for renewable fuels and the 2020 RFS volume requirements are statutorily required to be promulgated in FY 2019.

EISA also requires EPA to develop a comprehensive lifecycle GHG methodology to implement the Act's GHG threshold requirements for the RFS. Producers of new and advanced biofuels regularly seek to qualify their fuels under RFS and EPA will continue to apply its lifecycle analysis to such fuels to evaluate and determine eligibility for the program.

In FY 2019, EPA will maintain oversight of the RFS program and continue to evaluate compliance with RFS provisions through its system, which is used to track the creation, trades, and use of billions of Renewable Identification Numbers (RINs) for compliance. The tracking system handles 4,000 to 6,000 submissions per day, typically averaging more than 20,000 transactions per day, and the generation of more than 1.4 billion RINs per month. RINs are generated with the production of qualifying renewable fuel and are used to achieve national RFS programmatic goals of reducing or replacing the quantity of petroleum-based transportation fuel, heating oil, or jet fuel. In FY 2019, EPA will continue to implement its Fuel and Fuel Additive Registration program. The Agency will prioritize its review and decisions for Part 79 registrations.

[3] EPA National Port Strategy Assessment report: https://www.epa.gov/ports-initiative/national-port-strategy-assessment.

**Performance Measure Targets:**

| (CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all of the applicable emission requirements and may be entered into commerce. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 5,200 | 5,275 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$582.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$18,435.0/ -11.8 FTE) This program change streamlines technical assistance to states and local governments and focuses the program on core statutory requirements.

**Statutory Authority:**

Title II of the Clean Air Act; Motor Vehicle Information Cost Savings Act; Alternative Motor Fuels Act of 1988; National Highway System Designation Act; Energy Policy Act of 1992; Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); Energy Policy Act of 2005; Energy Independence and Security Act of 2007.

**Atmospheric Protection Program**
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $89,143.7 | $94,788.0 | $13,542.0 | -$81,246.0 |
| ***Science & Technology*** | ***$7,050.8*** | ***$7,964.0*** | ***$0.0*** | ***-$7,964.0*** |
| Total Budget Authority | $96,194.5 | $102,752.0 | $13,542.0 | -$89,210.0 |
| Total Workyears | 217.3 | 224.1 | 120.0 | -104.1 |

**Program Project Description:**

The Climate Protection Program supports implementation and compliance with greenhouse gas (GHG) emission standards for light-duty and heavy-duty vehicles developed under EPA's Federal Vehicle and Fuels Standards and Certification program. Resources under this program also support compliance activities for implementing the National Highway Traffic Safety Administration's (NHTSA) Corporate Average Fuel Economy (CAFE) standards. Under authorities contained in the Clean Air Act and the Energy Policy Act, EPA is responsible for issuing certificates and ensuring compliance with both the GHG and CAFE standards.

**FY 2019 Activities and Performance Plan:**

Resources and FTE for this program are proposed for elimination in FY 2019.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$7,964.0/ -33.8 FTE) This program change eliminates the program in the S&T account.

**Statutory Authority:**

Clean Air Act; Pollution Prevention Act (PPA), §§ 6602-6605; National Environmental Policy Act (NEPA), § 102; Clean Water Act, § 104; **S**olid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), § 8001; Energy Policy Act of 2005, § 756.

# Indoor Air and Radiation

**Radiation: Response Preparedness**
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $2,543.1 | $2,573.0 | $2,221.0 | -$352.0 |
| ***Science & Technology*** | ***$3,785.0*** | ***$3,658.0*** | ***$3,666.0*** | ***$8.0*** |
| Total Budget Authority | $6,328.1 | $6,231.0 | $5,887.0 | -$344.0 |
| Total Workyears | 39.7 | 39.2 | 31.5 | -7.7 |

## Program Project Description:

The National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada, provide laboratory analyses, field sampling and analyses, and direct scientific support to respond to radiological and nuclear incidents. This work includes measuring and monitoring radioactive materials and assessing radioactive contamination in the environment. This program comprises direct scientific field and laboratory activities to support preparedness, planning, training, and procedure development. In addition, program personnel are members of EPA's Radiological Emergency Response Team (RERT), a component of the Agency's emergency response program, and are trained to provide direct expert scientific and technical assistance. EPA's Office of Radiation and Indoor Air program's RERT asset is identified as an Agency Critical Infrastructure/Key Resource, and is part of the Nuclear Incident Response Team under Department of Homeland Security.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA's RERT will continue to provide support for federal radiological emergency response and recovery operations under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). They also will support basic field operations (e.g., on-site technical support/consultation, fixed laboratory, and mobile laboratory analyses) to provide rapid and accurate radionuclide analyses of environmental samples.[4]

In FY 2019, NAREL and NCRFO will prioritize and adjust the schedule to develop rapid methods and techniques for the laboratory analysis of samples and rapid deployment capabilities to ensure that field teams and laboratory personnel are ready to provide scientific data, analyses, and updated analytical techniques for radiation emergency response programs across the Agency. Both

[4] See additional information at: https://www.epa.gov/radiation/radiological-emergency-response.

organizations will maintain core levels of readiness for radiological emergency responses; participate in the most critical emergency exercises; provide scientific support to state radiation, solid waste, and health programs that regulate radiation remediation; participate in the Protective Action Guidance (PAG) application; and respond, as required, to radiological incidents.

**Performance Measure Targets:**

Work under this program supports performance results in Radiation Response Preparedness program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$317.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$309.0/ -4.3 FTE) This program change reflects a reduction in support activities for preparedness work within the Radiation: Response Preparedness program, including basic laboratory analytic functions, such as the measurement and monitoring of radioactive materials and the assessment of radioactive contamination in the environment.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Homeland Security Act of 2002; Atomic Energy Act of 1954; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Clean Air Act; Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA); Public Health Service Act (PHSA); Robert T. Stafford Disaster Relief and Emergency Assistance Act; Safe Drinking Water Act (SDWA).

**Indoor Air: Radon Program**
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $2,985.9 | $3,115.0 | $0.0 | -$3,115.0 |
| ***Science & Technology*** | ***$145.0*** | ***$158.0*** | ***$0.0*** | ***-$158.0*** |
| Total Budget Authority | $3,130.9 | $3,273.0 | $0.0 | -$3,273.0 |
| Total Workyears | 9.2 | 10.6 | 0.0 | -10.6 |

**Program Project Description:**

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities to address the public health risks posed by exposures to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, and advises the public of steps they can take to reduce exposure. For over 30 years EPA's radon program has provided important guidance and significant funding to help states establish their own programs.

**FY 2019 Activities and Performance Plan:**

Resources and FTE for this program are proposed for elimination in FY 2019. This is a mature program where states have technical capacity to continue this work.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$158.0) This program change proposes to eliminate funding for the Indoor Air: Radon program.

**Statutory Authority:**

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA); Clean Air Act.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $7,780.1 | $8,519.0 | $2,000.0 | -$6,519.0 |
| ***Science & Technology*** | ***$2,328.6*** | ***$1,996.0*** | ***$1,000.0*** | ***-$996.0*** |
| Hazardous Substance Superfund | $1,833.6 | $1,972.0 | $1,972.0 | $0.0 |
| Total Budget Authority | $11,942.3 | $12,487.0 | $4,972.0 | -$7,515.0 |
| Total Workyears | 58.9 | 59.1 | 25.0 | -34.1 |

**Program Project Description:**

EPA supports waste site characterization and cleanup by providing field and fixed laboratory environmental radioanalytical data and technical support, radioanalytical training to state and federal partners, and by developing new and improved radioanalytical methods. The National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada provide analytical and field operation support for radioanalytical and mixed waste testing, quality assurance, analysis of environmental samples, field radiological support, and field measurement systems and equipment to support site assessment, cleanup, and response activities in the event of a radiological accident or incident.

Together, these organizations provide technical support for conducting site-specific radiological characterizations and cleanups. They also develop guidance for cleaning up Superfund and other sites that are contaminated with radioactive materials.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA, in cooperation with states, tribes, and other federal agencies, will provide ongoing site characterization and analytical support for site assessment activities, remediation technologies, and measurement and information systems. EPA also will provide training and direct site assistance, including field surveys and monitoring, laboratory analyses, health and safety, and risk assessment support at sites with actual or suspected radioactive contamination.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$103.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$893.0/ -7.3 FTE) This program change reflects a reduction in support activities at the National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada.

**Statutory Authority:**

Atomic Energy Act of 1954; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Energy Policy Act of 1992; Nuclear Waste Policy Act of 1982; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978; Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Marine Protection, Research, and Sanctuaries Act; Clean Water Act.

**Reduce Risks from Indoor Air**
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $13,389.1 | $13,242.0 | $0.0 | -$13,242.0 |
| ***Science & Technology*** | ***$253.3*** | ***$144.0*** | ***$0.0*** | ***-$144.0*** |
| Total Budget Authority | $13,642.4 | $13,386.0 | $0.0 | -$13,386.0 |
| Total Workyears | 38.6 | 40.7 | 0.0 | -40.7 |

## Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate efforts at the federal, state, and local levels. EPA conducts field measurements and assessments and provides technical support for indoor air quality remediation, when requested.

## FY 2019 Activities and Performance Plan:

Resources and FTE for this program are proposed for elimination in FY 2019. This is a mature program where states have technical capacity to continue this work.

## Performance Measure Targets:

Currently there are no performance measures specific to this program.

## FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (-$144.0/ -1.6 FTE) This program change proposes to eliminate funding for this program.

## Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA); Clean Air Act.

# Enforcement

**Forensics Support**
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$13,228.8*** | ***$13,576.0*** | ***$10,486.0*** | ***-$3,090.0*** |
| Hazardous Substance Superfund | $1,543.6 | $1,097.0 | $1,097.0 | $0.0 |
| Total Budget Authority | $14,772.4 | $14,673.0 | $11,583.0 | -$3,090.0 |
| Total Workyears | 73.6 | 80.3 | 52.1 | -28.2 |

## Program Project Description:

The Forensics Support program provides expert scientific and technical support for criminal and civil environmental enforcement cases, as well as technical support for the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences.[5] The NEIC maintains a sophisticated chemistry laboratory and a corps of highly trained inspectors and scientists with expertise across media. The NEIC works closely with EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with EPA's Headquarters and Regional Offices to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Civil Enforcement program.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. The Forensics Support program provides expert scientific and technical support for EPA's criminal and civil enforcement efforts. In FY 2019, NEIC will continue to streamline its forensics work, and identify enhancements to our sampling and analytical methods, using existing technology. Work to collect and analyze materials in order to characterize contamination, and attribute it to individual sources and/or facilities, will remain the focus into the next fiscal year.

## Performance Measure Targets:

Currently there are no performance measures specific to this program.

[5] Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, 2009, available at: http://www.nap.edu/catalog.php?record_id=12589.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$758.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$3.0) This change to fixed and other costs is an increase due to the recalculation of lab fixed costs.

- (-$3,851.0/ -27.7 FTE) This program change reflects a focus on analyzing material to attribute it to individual sources or facilities and a reduction in other lab support.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Resource Conservation and Recovery Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Toxic Substances Control Act; Residential Lead-Based Paint Hazard Reduction Act; Federal Insecticide, Fungicide, and Rodenticide Act; Ocean Dumping Act (i.e., MPRSA); Emergency Planning and Community Right-to-Know Act.

# Homeland Security

**Homeland Security: Critical Infrastructure Protection**

Program Area: Homeland Security
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $936.9 | $956.0 | $1,263.0 | $307.0 |
| ***Science & Technology*** | ***$9,950.4*** | ***$9,153.0*** | ***$5,216.0*** | ***-$3,937.0*** |
| Total Budget Authority | $10,887.3 | $10,109.0 | $6,479.0 | -$3,630.0 |
| Total Workyears | 22.5 | 23.1 | 18.1 | -5.0 |

## Program Project Description:

Under the federal homeland security system, EPA is the Sector-Specific Agency responsible for implementing statutory and Presidential directives relating to homeland security for the water sector. EPA's water security program is implemented through close partnerships with the water sector, state emergency response and water program officials, and other federal agencies—most notably DHS, the U.S. Army Corps of Engineers, and the intelligence community. The water security program is not driven by regulatory requirements on water systems or the states, but instead operates on the basis of cooperative federalism by engaging federal, state, and local entities in defining annual objectives and identifying high priorities for immediate action.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. This program provides critical resources to coordinate and support protection of the nation's critical water infrastructure from terrorist threats and all-hazard events. Under this homeland security project area, EPA will train about 2,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger water and wastewater services. In FY 2019, EPA will provide tools, training, and technical assistance which will address the highest risks confronting the water sector.

Natural Disasters and General Preparedness

Drought, floods, hurricanes, earthquakes, and other natural disasters represent a high risk to the water sector owing to their historical frequency of occurrence and their enormous potential for destruction. As evident from several recent natural disasters, the level of preparedness within the water sector varies significantly—with many utilities lacking an adequate preparedness capability. In FY 2019, EPA will improve the preparedness of the water sector by providing nationwide training sessions to address natural disasters and general preparedness with the objective to train water and wastewater systems, state officials, and emergency response partners.

Specifically:

- EPA will provide in-person trainings and workshops which will include: Incident Command System (ICS)/National Incident Management System (NIMS) training; drought response training; flood response training; state functional exercises (scenarios of hurricane, floods, and earthquakes); resource typing and site access workshops; a regional interstate emergency response exercise (hurricane), etc.
- EPA will conduct tabletop and functional exercises to improve the operation of intra-state and inter-state mutual aid agreements among water utilities.
- EPA will continue to address high priority security areas as identified in the stakeholder generated *2017 Roadmap to a Secure and Resilience Water and Wastewater Infrastructure* with an emphasis on projects addressing the following four priorities: (1) establishing the critical lifeline status of the water and wastewater sector and translate that definition into strong support for the sector's needs and capabilities; (2) improving detection, response, and recovery to contamination incidents; (3) advancing preparedness and improving capabilities of the water and wastewater sector for area-wide loss of water and power; and (4) advancing recognition of vulnerabilities and needed responses related to cyber risk management.
- EPA will revisit two fundamental aspects of improving water security and resilience: risk assessment and emergency response planning.
- EPA will conduct nationwide training sessions with three critical, inter-dependent sectors: health care, emergency services, and energy. Most incidents, particularly natural disasters, have underscored the mutual reliance on the water sector with other lifeline sectors. Through training sessions with officials at the local, state, and federal levels from these other sectors, EPA will seek to improve coordination among critical lifeline sectors.
- EPA will sustain operation of the Water Desk in the Agency's Emergency Operations Center in the event of an emergency by: updating roles/responsibilities; training staff in the incident command structure; ensuring adequate staffing during activation of the desk; and coordinating with EPA's regional field personnel and response partners.
- EPA will develop annual assessments, as required under the National Infrastructure Protection Plan, to describe existing water security efforts and progress in achieving the sector's key metrics.

Water Security Initiative and Water Lab Alliance

The Water Security Initiative designs and demonstrates an effective system for timely detection and appropriate response to drinking water contamination threats and incidents through a pilot program that has broad application to the nation’s drinking water utilities in high-threat cities.

The FY 2019 request includes $2.8 million for necessary WSI Surveillance and Response System (SRS) activities to refine technical assistance products based on the five SRS pilots, implement a certification program for water utilities interested in receiving recognition for adopting contamination warning systems, and provide technical assistance to the dozens of water utilities that seek to leverage EPA’s expertise in deploying their own warning system.

In FY 2019, EPA will train about 250 drinking water utilities in the design, operation, and response components of contaminant early warning systems. In FY 2019, specifically:

- EPA's continued efforts to promote the water sector's adoption of Water Quality Surveillance and Response Systems to rapidly detect and respond to water quality problems such as contamination in the distribution system in order to reduce public health and economic consequences through the development of several online training modules and webinars, as well as the provision of in-person direct technical assistance.
- EPA will complete development of its SRS Capabilities Assessment Tool, a web-based, easy-to-use, decision support tool that presents the user with a series of questions by which to assess existing detection and response capabilities, compare these existing capabilities to a target capability, and identify potential enhancements to address gaps between the existing and target capabilities.
- EPA also is exploring the possibility of launching SRS implementation pilots within the water sector - the purpose of which will be to: demonstrate the application of SRS tools to designing and operating an early warning system for contamination events; illustrate additional applications of SRS tools, such as extending the SRS approach to source water monitoring; and identify champions within the industry for implementing surveillance and response systems.

In a contamination event, the sheer volume or unconventional type of samples could quickly overwhelm the capacity or capability of a single laboratory. To address this potential deficiency, EPA has established a national Water Laboratory Alliance (WLA) comprised of laboratories harnessed from the range of existing lab resources from the local (e.g., water utility) to the federal levels (e.g., the Centers for Disease Control and Prevention's (CDC) Laboratory Response Network). In FY 2019, EPA will continue to promote, through exercises, expert workshops, and association partnerships, the Water Laboratory Alliance Plan, which provides a protocol for coordinated laboratory response to a surge of analytical needs. Under WLA, EPA will train, in FY 2019, approximately 100 laboratories in improving their ability to handle potential problems associated with surge capacity and analytical method capabilities during an emergency. In particular:

- EPA will continue work with regional and state environmental laboratories to conduct exercises and continue efforts to automate the exercises enabling laboratories and other members of the water sector to participate in exercises simultaneously and continue the innovative practice of pursuing validation of methods through exercises.
- EPA will expand the membership of the WLA with the intention of achieving nationwide coverage. The WLA has 140 member laboratories that are geographically diverse and can provide a wide range of chemical, biological, and radiological analyses. In order for the WLA to become a robust infrastructure that can cover major population centers and address a diverse array of high priority contaminants, membership must continue to increase.
- EPA will continue to target laboratories located in areas where the Water Laboratory Alliance has both inadequate membership levels and gaps in laboratory analytical capabilities.

- EPA will coordinate with other federal agencies, primarily DHS, CDC, Food and Drug Administration, and Department of Defense, on biological, chemical, and radiological contaminants of high concern, and how to detect and respond to their presence in drinking water and wastewater systems.
- EPA will continue to implement specific recommendations of the Water Decontamination Strategy as developed by EPA and water sector stakeholders (e.g., defining roles and responsibilities of local, state, and federal agencies during an event).

Cybersecurity

Cybersecurity represents a substantial concern for the sector, given the ubiquitous access to critical water treatment systems from the Internet. In FY 2019, EPA will fulfill its obligations under Executive Order (EO) 13636 – Improving Critical Infrastructure Cybersecurity – which designated EPA as the lead federal agency responsible for cybersecurity in the water sector. EPA also will partner with the water sector to promote cybersecurity practices and gauge progress in the sector's implementation of these practices as directed by the Cybersecurity Enhancement Act of 2014, conducting nationwide training sessions in cybersecurity threats and countermeasures for about 200 water and wastewater utilities. Specifically, in FY 2019:

- EPA will conduct one-day classroom training at locations distributed nationally on water sector cybersecurity. The training will address cybersecurity threats, vulnerabilities, consequences, best practices, and incident response planning.
- EPA will need to update and develop new course materials owing to the evolving nature of the cyber threat.
- EPA also will develop brief, targeted guidance documents for underserved segments of the water sector, such as small systems and technical assistance providers.
- EPA will develop outreach materials to promote the adoption of cybersecurity practices across the water sector.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$588.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$3,349.0/ -7.0 FTE) This program change represents a reduction to the number of nationwide training sessions to address natural disasters, general preparedness, and Water Laboratory Alliance Plan activities.

**Statutory Authority:**

Safe Drinking Water Act (SDWA), §§ 1431-1435; Clean Water Act; Public Health Security and Bioterrorism Emergency and Response Act of 2002; Emergency Planning and Community Right-to-Know Act (EPCRA), §§ 301-305.

**Homeland Security: Preparedness, Response, and Recovery**
Program Area: Homeland Security
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$23,161.0*** | ***$23,298.0*** | ***$22,461.0*** | ***-$837.0*** |
| Hazardous Substance Superfund | $33,899.4 | $31,461.0 | $31,752.0 | $291.0 |
| Total Budget Authority | $57,060.4 | $54,759.0 | $54,213.0 | -$546.0 |
| Total Workyears | 128.9 | 127.4 | 127.1 | -0.3 |

## Program Project Description:

Exposure to hazardous chemicals, microbial pathogens, and radiological materials that are released into the environment could pose catastrophic consequences to the health of first responders and all American citizens. EPA has responsibility, under legislation and Presidential Directives, to remediate contaminated environments affected by incidents such as terrorist attacks, industrial accidents, or natural disasters. EPA's disaster-related responsibilities are described by the following three objectives in the Homeland Security Research Program's (HSRP's) Strategic Research Action Plan (StRAP): (1) protecting America's water systems; (2) remediation of indoor and outdoor contaminated areas, and (3) the development of a nationwide laboratory network with the capability and capacity to analyze for chemical, biological, radiological, and nuclear (CBRN) agents during routine monitoring and in response to terrorist attacks and other disasters.

EPA also is responsible for operating and maintaining the network of near real-time stationary and deployable monitors known as RadNet under the Nuclear/Radiological Incident Annex to the National Response Framework (NRF). This network is critical in responding to large-scale incidents with regional impacts such as Fukushima. This network is identified as an EPA Critical Infrastructure/Key Resource asset. EPA additionally serves as the Sector-Specific Agency (SSA) for the water sector, coordinating water sector-specific risk assessment and management strategies and assessing and mitigating cybersecurity risks with DHS and the sector under Executive Order 13636: Improving Critical Infrastructure Cybersecurity.

Funding will support research to fill critical gaps in EPA's capability to carry out the aforementioned responsibilities that help communities prepare for, absorb, and recover from disasters – safeguarding their economic, environmental, and social well-being. HSRP will continue to build upon its record of providing measurable benefits to its program office and regional partners, and state and local stakeholders through the development of innovative solutions for decontamination and remediation. HSRP will deliver effective tools, methods, information, and guidance to local, state, and federal decision-makers that will address both critical terrorism-related issues and natural or manmade disasters.

Research is planned and prioritized based on the needs of end-users of this science, including regional On-Scene Coordinators[6] (OSCs), water utility companies, states, and EPA program and regional offices.[7] Priorities also are informed by lessons learned from EPA response activities, advice from external review boards, such as the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB), and participation on Office of Science and Technology Policy (OSTP) subcommittees and workgroups. The HSRP collaborates with state, local, and private sector organizations and key federal agencies[8] to prioritize research needs and prevent the duplication of scientific and technical work.

**Recent Accomplishments:**

- **Responding to Water Emergencies – Chemical Threats in Water Systems**
  There are approximately 153,000 public drinking water systems and more than 16,000 publicly owned wastewater treatment systems in the United States. More than 80 percent of the U.S. population receives their potable water from these drinking water systems and about 75 percent of the U.S. population has its sanitary sewerage treated by these wastewater systems.[9] Within the past year, threats to drinking water systems ran the spectrum from toxic chemicals accidentally being introduced into a water system to concerns over an intentional attempt to poison a drinking water system.[10] To prepare for these incidents, HSRP examined the interactions of chemical threats with water infrastructure, premise plumbing, and appliances. Research included full-scale studies of decontamination methods in drinking water distribution system infrastructure (iron and concrete) as well as home plumbing materials (PVC and copper) and appliances. Findings from these studies and decontamination methods will be shared with EPA water programs, associations representing water utilities, and states so that they can incorporate the latest state-of-the-science into their guidance and tools for utilities.

- **Decision Support Tools to Support Remediation**
  Remediation decisions during a response to a wide-area contamination incident are complex. Decisions on decontamination approaches can impact the success of the remediation, the amount of wastes to be managed, and, ultimately, public health. To support effective decision making that accounts for these interdependencies, HSRP developed the Waste Estimation Support Tool to examine tradeoffs between decontamination decisions and waste management during a wide-area biological incident. The tool can anticipate affected infrastructure and its composition by using sampling data and a map of the contamination plume in order to assist the Incident Command/Unified Command (IC/UC) in determining the waste streams that will be generated based on their decontamination decision. HSRP also developed DeconST, a remediation decision support tool, for buildings/facilities that are contaminated with chemical threats. This tool presents a comparison of various remediation

[6] On-Scene Coordinators (OSCs) are the federal officials responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government.
[7] Water programs, Land & Emergency Management programs, and EPA Regions.
[8] Partners include: Department of Homeland Security (DHS), Department of Defense (DoD), Centers for Disease Control and Prevention (CDC), Federal Bureau of Investigation (FBI), National Institute of Health (NIH), National Science Foundation (NSF), Department of Energy (DOE), and Department of Agriculture (DOA).
[9] For more information, see: https://www.dhs.gov/water-and-wastewater-systems-sector.
[10] These examples include the Corpus Christie drinking water system incident and threats made by ISIS to German water systems.

technologies, estimates waste and cost, and allows decision makers to compare different remediation options.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 - 2022 Strategic Plan.

- **Characterizing Contamination and Assessing Exposure**
  During an incident, EPA oversees and provides support to state and local governments for site characterization[11] and remediation of contaminated water systems, and indoor and outdoor areas. HSRP activities in this topic fill critical scientific research gaps by providing the science needed for effective sampling strategy development; developing sampling and analysis methods for biological contaminants, and developing methods to assess exposure pathways for biological contamination to inform all aspects of the response. In FY 2019, HSRP will:

  - Develop innovative bio-threat agent sampling and analytical methods for the Selected Analytical Methods (SAM) for Environmental Remediation and Recovery document, available on a publically-accessible website, to support post-incident decisions regarding exposure assessment, remediation, and re-occupancy.[12]
  - Develop sample strategy options for characterization after a wide-area biological incident and sampling methods to reduce the logistical burden of characterization.
  - Inform sampling and decontamination decision making through the study of the fate and transport of bio-threat agents after a release in an urban environment.

- **Water System Security and Resilience**
  As the lead Agency overseeing the Water Sector, EPA addresses Water Sector research needs identified by the Water Sector Coordinating Council and the Water Government Coordinating Council's Critical Infrastructure Partnership Advisory Council.[13] The following research in this topic describes how HSRP will develop tools and data to address water system contamination and water system disaster resilience. In FY 2019, HSRP will:

  - Provide solutions for water contamination incidents by conducting field-scale evaluations of water contamination sensors, decontamination methodologies, and water treatment at the Water Security Test Bed. Data from these studies are made available to water utilities through outreach activities with utilities.
  - Develop methods to decontaminate infrastructure and manage contaminated water for priority contaminants, including studying their fate and transport in infrastructure to inform sampling and decontamination strategies.

[11] The process of identifying and quantifying the contaminants in environmental samples of a site to determine the nature and extent of contamination present.
[12] To access, please see: https://www.epa.gov/homeland-security-research/sam.
[13] The Water Sector Coordinating Council is a "self-organized, self-run, and self-governed council" composed of water utilities. This council facilitates the development of policy impacting the water sector. The Water Government Coordinating Council was formed as the federal government counterpart to the Water Sector Coordinating Council and is responsible for interagency coordination of efforts related to the water sector.

- **Remediating Wide Areas**
  EPA will continue to address critical scientific knowledge gaps in responding to and recovering from wide-area biological attacks on urban centers and public areas. EPA will develop tools, methods, and technologies for decision makers and OSCs to respond to disasters, providing solutions that optimize cleanup efficacy, and minimize cost, recovery time, and unintended consequences. In FY 2019, HSRP will:

  - Provide decision makers real-time access to the latest research supporting remediation by developing a database that catalogs data on the effectiveness of decontamination technologies and operational and logistical considerations.
  - Improve sampling and decontamination decision-making through the development of a proof-of-concept, virtual-reality training tool that allows the user a simulated sampling and decontamination experience. This tool will support pre-incident training and reduce the time responders spend in the hot zone during a response.
  - Develop approaches to improve the capacity to conduct large-scale bio-agent cleanup including methods that are widely available to local, state and federal responders, such as municipal equipment (e.g., street sweepers) and commercial off-the-shelf methods for effective distribution of decontaminants (e.g., pool chemicals).
  - Develop scalable decontamination technologies for wide-area use and waste management approaches for chemical, biological, and radiological incidents. For chemical threats, approaches will predict decontamination efficacy and provide a basis for field-scale testing of remediation methods. All methods developed are transitioned to state, local, and federal responders through guidance developed by HSRP's Program Office Partners.[14]

**Radiation Monitoring**

The RadNet fixed monitoring network provides near real-time radiation monitoring coverage near each of the 100 most populous U.S. cities as well as expanded geographic coverage for a total of 140 monitoring sites. The RadNet air monitoring network will provide the Agency, first responders, and the public with greater access to data, and should there be a radiological emergency, improve officials' ability to make decisions about protecting public health and the environment during and after an incident. Additionally, the data will be used by scientists to better characterize the effect of a radiological incident.

In FY 2019, the Agency will continue to operate and maintain the RadNet air monitoring network, providing essential maintenance to routinely operating fixed stations. Fixed stations will operate in conjunction with available deployable monitors during a radiological incident.

[14] Office of Land and Emergency Management's Office of Emergency Management and Office of Resource Conservation and Recovery.

**Performance Measure Targets:**

| (HS1) Percentage of planned research products completed on time by the Homeland Security research program. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

| (HS2) Percentage of planned research outputs delivered to clients and partners to improve their capabilities to respond to contamination resulting from homeland security events and related disasters. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

The tables reflect the HSRP's annual performance measures. EPA uses these measures to assess its effectiveness in delivering needed products and outputs to clients (decision-makers, states, and local governments).

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$269.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$244.0/ -1.0 FTE) This program change reflects a decrease in FTE and contract dollars used to keep RadNet capabilities current with technology to monitor the nation's air, precipitation, and drinking water for radiation.

- (+$910.0/ +5.0 FTE) This program change reflects an increase for a focused effort to meet EPA's responsibilities as the water Sector-Specific Agency (SSA) implementing specific statutory and Presidential directives relating to water security.

- (-$929.0/ -4.0 FTE) This changes EPA's timeline to carry out its mandates to develop strategies and methods for characterizing, decontaminating, and managing waste from an intentional or unintentional release of chemical and radiological agents that results from currently understood threats.

- (-$843.0/ -0.3 FTE) This program change refocuses resources from the development of tools to support resilience of water systems, including response to contamination incidents, and evaluation of sensors to support detection of contamination.

**Statutory Authority:**

Atomic Energy Act of 1954; Clean Air Act, §§ 102, 103; Comprehensive Environmental Response Compensation and Liability Act (CERCLA), §§ 104-106; Safe Drinking Water Act (SDWA), §§ 1431-1435, 1442; Robert T. Stafford Disaster Relief and Emergency Assistance Act; National Defense Authorization Act for Fiscal Year 1997, §§ 1411-1412; Public Health Security and Bioterrorism Preparedness Response Act of 2002; Toxic Substances Control Act (TSCA), § 10; Oil Pollution Act (OPA); Pollution Prevention Act (PPA); Resource Conservation and Recovery Act (RCRA); Emergency Planning and Community Right-to-Know Act (EPCRA); Clean Water

Act; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA); Food Quality Protection Act (FQPA); Food Safety Modernization Act (FSMA), §§ 203, 208.

## Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $4,918.0 | $5,336.0 | $4,986.0 | -$350.0 |
| ***Science & Technology*** | ***$438.0*** | ***$446.0*** | ***$500.0*** | ***$54.0*** |
| Building and Facilities | $6,119.2 | $6,631.0 | $6,176.0 | -$455.0 |
| Hazardous Substance Superfund | $1,306.2 | $934.0 | $934.0 | $0.0 |
| Total Budget Authority | $12,781.4 | $13,347.0 | $12,596.0 | -$751.0 |
| Total Workyears | 5.9 | 12.2 | 12.2 | 0.0 |

### Program Project Description:

This program supports activities to ensure that EPA's physical structures and assets are secure and operational and that certain physical security measures are in place to help safeguard staff in the event of an emergency. These efforts also protect the capability of EPA's vital laboratory infrastructure assets. Specifically, funds within this appropriation support security needs for the National Vehicle and Fuel Emissions Laboratory (NVFEL).

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan.

In FY 2019, the Agency will continue to provide enhanced physical security for the NVFEL and its employees. This funding supports the incremental cost of security enhancements required as part of an Agency security assessment review.

### Performance Measure Targets:

Currently there are no performance measures specific to this program.

### FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+$55.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$1.0) This program change reduces the budget for infrastructure security at the Agency's National Vehicle and Fuel Emissions Laboratory (NVFEL).

**Statutory Authority:**

Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

## IT/ Data Management/ Security

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $82,580.0 | $83,179.0 | $69,264.0 | -$13,915.0 |
| ***Science & Technology*** | ***$3,342.0*** | ***$3,068.0*** | ***$2,725.0*** | ***-$343.0*** |
| Hazardous Substance Superfund | $14,691.5 | $13,720.0 | $13,720.0 | $0.0 |
| Total Budget Authority | $100,613.5 | $99,967.0 | $85,709.0 | -$14,258.0 |
| Total Workyears | 441.0 | 498.3 | 457.9 | -40.4 |

## Program Project Description:

EPA's Information Technology/Data Management (IT/DM) program promotes the use of quality environmental information for informing decisions, improving management, documenting performance, and measuring success, which supports the Agency's mission to protect public health and the environment. Science and Technology (S&T) resources for EPA's IT/DM program fund the following activities: Quality Program,[15] EPA libraries, and One EPA Web.

The Quality Program provides quality policies and practices that are intended to ensure that all environmentally-related data activities performed by or for the Agency will result in the production of data that are of adequate quality to support their intended uses. In order for the data to be used with a high degree of certainty for intended users, the quality of the data must be known and documented. The Quality Program provides Quality Assurance (QA) policies, training, oversight and technical support to assist EPA's programs in implementing quality management systems for all environmental data operations. The Quality Program also oversees the implementation of EPA's Information Quality Guidelines.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. The Quality Program will continue to provide technical support to all EPA program/regional offices and laboratories in implementing EPA quality policies, procedures and standards. In FY 2019, the Quality Program plans to conduct several Quality Management Plan reviews and Quality System Assessments for selected EPA programs. These oversight activities help ensure the quality of EPA's data for intended uses, including environmental decision-making. Additionally, the Quality Program will provide oversight of EPA's Information Quality Guidelines and facilitate the development of agency responses to public requests for correction of information disseminated by EPA. The Agency's

[15] More information about EPA Quality Program can be found at http://www.epa.gov/quality.

S&T resources for IT/DM also will help provide library services to all EPA employees and the public, as well as support the hosting of EPA's websites and Web pages.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$526.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$869.0/ -3.6 FTE) This program change reflects a reduction to the technical support for conducting quality assurance oversight, training, policy development, and support for agency-wide quality activities.

**Statutory Authority:**

Federal Information Security Management Act (FISMA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Food Quality Protection Act (FQPA); Safe Drinking Water Act (SDWA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); Freedom of Information Act (FOIA); Controlled Substances Act (CSA).

# Operations and Administration

**Facilities Infrastructure and Operations**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $293,997.9 | $305,844.0 | $300,738.0 | -$5,106.0 |
| ***Science & Technology*** | ***$64,642.7*** | ***$67,875.0*** | ***$68,834.0*** | ***$959.0*** |
| Building and Facilities | $26,065.5 | $27,602.0 | $33,377.0 | $5,775.0 |
| Leaking Underground Storage Tanks | $502.2 | $793.0 | $773.0 | -$20.0 |
| Inland Oil Spill Programs | $376.2 | $580.0 | $665.0 | $85.0 |
| Hazardous Substance Superfund | $69,651.3 | $75,985.0 | $74,144.0 | -$1,841.0 |
| Total Budget Authority | $455,235.8 | $478,679.0 | $478,531.0 | -$148.0 |
| Total Workyears | 323.4 | 356.7 | 318.0 | -38.7 |

## Program Project Description:

Science & Technology (S&T) resources in the Facilities Infrastructure and Operations program fund rent, utilities, and security. This program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, energy conservation, sustainable buildings programs, and space planning. Funding is allocated for such services among the major appropriations for the Agency.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will continue to invest to reconfigure EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[16] the *Federal Assets Sale and Transfer Act of 2016*. Between FY 2015 and FY 2022 EPA will have released over 850,000 square feet of space nationwide, resulting in a cumulative annual rent avoidance of nearly $30 million across all appropriations. These savings help offset EPA's escalating rent and security costs.

S&T resources fund FY 2019 planned laboratory consolidations in Athens, GA, Willamette, OR, and Gross Ile, MI. Planned consolidations through FY 2019 will allow EPA to release an estimated 306,000 square feet of space. For FY 2019, the Agency is requesting $28.75 million for rent, $19.66 million for utilities, and $13.92 million for security in the S&T appropriation.

[16] For additional information, refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

## Performance Measure Targets:

| (FA1) Reduction in EPA Space (sq. ft. owned and leased). | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 241,000 | 65,000 |

## FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+$302.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$299.0) This change to fixed and other costs is an increase due to the recalculation of rent, utilities and security.

- (+$358.0) This program change reflects an increase to support facility operations to meet basic needs and to fund cost escalation for contracts that support activities like custodial, landscaping, and warehouse activities at EPA's research and development facilities and laboratories.

## Statutory Authority:

Federal Property and Administration Services Act; Public Building Act; Robert T. Stafford Disaster Relief and Emergency Assistance Act; Clean Water Act; Clean Air Act; Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Community Environmental Response Facilitation Act (CERFA); Energy Policy Act of 2005; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Workforce Reshaping**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $0.0 | $0.0 | $25,549.0 | $25,549.0 |
| ***Science & Technology*** | ***$0.0*** | ***$0.0*** | ***$5,994.0*** | ***$5,994.0*** |
| Total Budget Authority | $0.0 | $0.0 | $31,543.0 | $31,543.0 |

**Program Project Description:**

Science and Technology (S&T) resources for the workforce reshaping program support organizational restructuring efforts throughout the Agency. To help achieve its mission, EPA will develop, review and analyze mission requirements and implement options to effectively align and redistribute the Agency's workforce based on program priorities, resource reallocation, and technological advances.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. Effective workforce reshaping is critical to EPA's ability to accomplish its mission. EPA will be examining our statutory functions and processes to eliminate inefficiencies and streamline our processes. Primary criteria will include effectiveness and accountability, as EPA is focused on greater value and real results. These analyses will likely create a need to reshape the workforce. The Agency anticipates the need to offer voluntary early out retirement authority (VERA) and voluntary separation incentive pay (VSIP), and potentially relocation expenses, as part of the workforce reshaping effort.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$5,994.0) In support of the reprioritization of agency activities, this increase will support:
  - Voluntary early out retirement authority
  - Voluntary separation incentive pay
  - Workforce support costs for relocation of employees as we realign work assignments.

**Statutory Authority:**

5 U.S.C. 8336(d)(2) includes the statutory VERA provisions for employees covered by the Civil Service Retirement System. 5 U.S.C. 8414(b)(1)(B) includes the statutory VERA provisions for employees covered by the Federal Employees Retirement System. Section 1313(b) of the Chief Human Capital Officers Act of 2002 (Public Law 107-296, approved November 25, 2002) authorized the VSIP option under regulations issued by OPM, as codified in sections 3521 to 3525 of title 5, United States Code (U.S.C.).

# Pesticides Licensing

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $56,911.0 | $55,696.0 | $45,949.0 | -$9,747.0 |
| ***Science & Technology*** | ***$2,938.3*** | ***$3,090.0*** | ***$2,406.0*** | ***-$684.0*** |
| Total Budget Authority | $59,849.3 | $58,786.0 | $48,355.0 | -$10,431.0 |
| Total Workyears | 413.6 | 418.7 | 416.5 | -2.2 |

## Program Project Description:

EPA's Pesticide Program screens new pesticides before they reach the market and ensures that pesticides already in commerce are safe. As directed by Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act (FQPA) of 1996, as well as the Pesticide Registration Improvement Extension Act of 2012[17] (or subsequent legislation), EPA is responsible for registering and re-evaluating pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. To make regulatory decisions and establish tolerances (maximum allowable pesticide residues on food and feed) for food use pesticides and for residential or non-occupational use, EPA must find the pesticide safe, including cumulative and aggregate risks, and ensure extra protection for children. The Agency must balance the risks and benefits of other uses.

EPA's Chemical Safety, Pollution Prevention and Pesticide program operates two laboratories that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development and validation efforts. The laboratories also provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations.

*EPA's Microbiology Laboratory*

The Microbiology Laboratory develops and standardizes product efficacy test methods for public health pesticides (i.e., antimicrobial pesticides) and generates data to support programmatic decision-making. Antimicrobial pesticides are essential in combating pathogenic microorganisms on environmental surfaces, including surfaces contaminated with new and emerging pathogens.

[17] Authority provided under the Pesticide Registration Improvement Extension Act of 2012 expired on September 30, 2017. Authority to continue to collect fees has been authorized by H.R. 601 - Continuing Appropriations Act, 2018, and subsequent Continuing Resolutions through February 8, 2018.

The Microbiology Laboratory leads the federal effort on designing and standardizing ways to test important infectious agents such as *Clostridium difficile* (*C. difficile)* and multi-drug resistant *Candida auris.* Deaths related to *C. difficile* (hospital-acquired infections) continue to increase due in part to a stronger germ strain, and have now reached ~14,000 deaths per year. Almost half of the infections occur in people younger than 65, but more than 90 percent of the deaths occur in people 65 and older.[18] The organism has been shown to persist in the hospital environment, and disinfectants are essential to reduce disease transmission. As of August 31, 2017, a total 153 cases of multidrug resistant *Candida auris* infections have been reported to CDC from 10 states in the U.S.[19] This multi-drug resistant *Candida auris* is emerging globally and can cause serious and sometimes fatal fungal infections. Any new emerging human or animal pathogen (H1N1, *Clostridium difficile*, MRSA, etc.) represents a new method-development challenge for evaluating disinfectants. The goal is to standardize the procedures to ensure consistent data from the testing community. In 2017 and at the request of CDC, the laboratory mobilized quickly to develop a new test methodology and efficacy data to ensure that guidance to hospitals is adequate for environmental cleaning and disinfection of the multi-drug resistant *Candida auris*. The laboratory also updated the regulatory guidance and test methods for *C. difficile* in 2017 to ensure the efficacy of antimicrobial products for this pathogen.

The laboratory also is leading efforts to evaluate an internationally harmonized efficacy test method, the Organization for Economic Cooperation and Development (OECD) quantitative test method, as well as methods for *Pseudomonas and Staphylococcus* biofilms, feline calcivirus, *Mycobacterium,* and a new quantitative test method for evaluating hospital disinfectant towelette formulations. Final guidance and test methods for registering claims against biofilms were issued in 2017.

The laboratory analyzed data from two collaborative studies in FY 2016 for the towelette method and the virus component of the OECD method. Following data analysis, methods also will be adopted or placed under review at standard-setting organizations such as the American Society for Testing and Materials or Association of Official Analytical Communities. Methods are posted at https://www.epa.gov/pesticide-analytical-methods/antimicrobial-testing-methods-procedures-developed-epas-microbiology.

*EPA's Analytical Chemistry Laboratory*

The Analytical Chemistry Laboratory provides technical review of enforcement methods and method validation and serves as a third-party confirmation laboratory. In addition, the laboratory provides analytical and technical support to Regional Offices in enforcement cases, such as evaluating possible adverse effects of pesticide use, including contaminated, deficient, or illegally labeled products. The laboratory develops and validates multi-residue pesticide methods to monitor and enforce agricultural uses of pesticides, and to analyze for pesticide residues in water, soil, bees, crops, feeds. Multi-residue methods are a quicker and more cost effective "one-stop-shop" method for multiple (100+) pesticides, based on their mode of action and chemical properties. The laboratory is leading a team of chemists from EPA's Pesticide Programs, Food and

[18] http://www.cdc.gov/media/releases/2012/p0306_cdiff.html.
[19] https://www.cdc.gov/fungal/diseases/candidiasis/c-auris-alert-09-17.html.

Drug Administration, United States Department of Agriculture, and Canada's Pest Management Regulatory Agency in the update of the agency's 860.1360 Residue Chemistry Guidelines for Multi-Residue Methods. The new guidelines, when approved as a replacement for the current guideline (written in 1987), will enable the submission of multi-residue methods for use in enforcement and tolerance setting, based on more cost effective and reliable techniques.

The Analytical Chemistry Laboratory works to standardize analytical methods that provide the Agency with scientifically valid data for use in risk assessment. One example, is the standardization of a tarp testing method to assist EPA in establishing measures to reduce potential exposures from soil fumigants to agricultural workers and bystanders. The work involved developing and validating a method to generate data for determining the permeability of fumigants through agricultural tarps. This data is used to establish a buffer zone credit when agricultural tarps are used, with the least permeable tarp getting the highest buffer zone reduction. They also provide crop growers with information to determine the best tarps for their practices. The method is now standardized by the American Society of Testing and Materials (ASTM) International, and allows tarps manufacturers to generate such data when applying for a buffer zone credit for newly manufactured tarps. The laboratory continues to support EPA by reviewing and commenting on such data.

The Analytical Chemistry Laboratory also operates EPA National Pesticide Standard Repository (NPSR), which collects and maintains pesticide standards (samples of pure active ingredients or technical grade active ingredients for pesticides). It distributes these standards (~5,000 per year) to EPA and other federal, state, and tribal laboratories involved in pesticide use enforcement.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the Agency will protect human health by ensuring the availability of appropriate analytical methods for analyzing pesticide residues in food, feed, water, soil, and bees (and their products), and ensuring their suitability for monitoring pesticide residues, and enforcing tolerances. The Microbiology laboratory will continue with efficacy testing of antimicrobials; complete current method development activities; present data to the international community on the OECD collaborative data and determine the course of action with respect to the method; initiate method development on *Legionella*; participate in an industry-led collaborative on *Salmonella*; and initiate a collaborative study with *Trichophyton*. The laboratory will assist with efforts to formulate a new regulatory schematic for evaluating claims based on use of a disinfectant hierarchy for establishing efficacy claims for antimicrobials. Post-registration testing of antimicrobials enables the agency to remove ineffective products from the market. When EPA labs develops new methods, the regulated community is able to register new products for use against emerging pathogens.

Additionally, EPA will continue to do the following in FY2019:

- Develop improved analytical methods using state of the art instruments to replace outdated methods, thus increasing laboratory efficiency and accuracy of the data

- Provide analytical support to fill in data gaps for the Pesticide Programs' risk assessment and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation
- Provide analytical assistance and technical advice to all regional offices in their enforcement cases
- Operate EPA's National Pesticide Standard Repository (NPSR)
- Verify that antimicrobial pesticides are properly formulated
- Validate, optimize, and standardize a method to determine permeability of agricultural tarps for fumigants

**Performance Measure Targets:**

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$385.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$1,069.0/ -1.3 FTE) This program change is a reduction for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

**Statutory Authority:**

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA), §408.

**Pesticides: Protect the Environment from Pesticide Risk**
Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $36,654.9 | $38,302.0 | $28,727.0 | -$9,575.0 |
| ***Science & Technology*** | ***$2,046.2*** | ***$2,325.0*** | ***$2,122.0*** | ***-$203.0*** |
| Total Budget Authority | $38,701.1 | $40,627.0 | $30,849.0 | -$9,778.0 |
| Total Workyears | 271.1 | 269.3 | 268.4 | -0.9 |

**Program Project Description:**

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), Section 3(c)(5), states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices, the product "will also not generally cause unreasonable adverse effects on the environment." FIFRA defines "unreasonable adverse effects on the environment", as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide."[20]

In compliance with FIFRA, EPA conducts risk assessments using the latest scientific methods to determine the risks that pesticides pose to human health and ecological effects on plants, animals, and ecosystems that are not the targets of the pesticide. The Agency's significant regulatory decisions are posted for review and comment to ensure that these actions are transparent and to allow stakeholders, including at-risk populations, to be engaged in decisions that affect their environment. EPA must determine that food and residential uses of pesticides are safe. For other risk concerns, EPA must balance the risks of the pesticides with benefits provided from the use of the product. To avoid unreasonable risks, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying some or all uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may require monitoring of environmental conditions, such as effects on water sources or the development and submission of additional laboratory or field study data by the pesticide registrant.

In addition to FIFRA responsibilities, the Agency has responsibilities under the Endangered Species Act (ESA).[21] Under the ESA, EPA must ensure that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or result in jeopardy to the continued

[20] Federal Insecticide, Fungicide and Rodenticide Act. Sections 2 and 3, Definitions, Registration of Pesticides (7 U.S.C. §§ 136, 136a). Available online at http://www.epa.gov/opp00001/regulating/laws.htm.

[21] The Endangered Species Act of 1973 sections 7(a)(1) and 7 (a)(2); Federal Agency Actions and Consultations (16 U.S.C. 1536(a)). Available at U.S. Fish and Wildlife Service, Endangered Species Act of 1973 internet site: http://www.fws.gov/endangered/laws-policies/section-7.html.

existence of species listed by the U. S. Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS) as threatened or endangered. Where risks are identified, EPA must work with the FWS and NMFS in a consultation process to ensure these pesticide registrations also will meet the ESA standard.

The national program laboratories of EPA's Pesticide Programs provide a diverse range of environmental data that EPA uses to make informed regulatory decisions. The Analytical Chemistry Laboratory and the Microbiology Laboratory each provide critical laboratory testing and support activities to assist the decision-making processes of the Agency. The laboratories develop methods to test the efficacy of antimicrobial pesticides, evaluate the efficacy of antimicrobial products, and validate analytical chemistry methods to ensure that the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), EPA, and states have reliable methods to measure and monitor pesticide residues in food and in the environment.

*EPA's Microbiology Laboratory*

The Microbiology Laboratory ensures that antimicrobial pesticides deliver intended results by evaluating efficacy and registrant claims. The laboratory provides analyses that support the development of efficacy data for pesticides used for the decontamination of buildings (such as chlorine dioxide), supports research on methods and rapid detection assays, and evaluates commercial products used for the remediation and decontamination of sites contaminated with biothreat agents such as *Bacillus anthracis* (commonly known as anthrax). Work conducted by the laboratory led to a regulatory framework for licensing products against *Bacillus anthracis* as outlined in Pesticide Registration Notice 2008-2. Several products are now registered against this biothreat agent. The Microbiology Laboratory is the only EPA laboratory with a select agent registration under the CDC's select agent program, enabling the laboratory to receive, transfer, and work with *Bacillus anthracis*.

*EPA's Analytical Chemistry Laboratory*

The Analytical Chemistry Branch Laboratory supports the work of EPA to determine the ecological risks that pesticides pose to ecosystems, plants, and animals, such as bees, that are not the targets of the pesticide by bringing new analytical methods online and using in-house expertise to develop and validate multi-residue pesticide analytical methods. Additional benefits are gained by transferring technologies, such as the multi-residue methods, to other EPA organizations and state laboratories for use in monitoring pesticide residues in the environment and ecological systems, and the standard method for testing permeability of agricultural tarps to fumigants, which is currently used by tarp manufacturers to measure the efficiency of newly developed and manufactured tarps.

The Analytical Chemistry Laboratory will continue to provide analytical support to fill data gaps for the pesticide program's risk assessments and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation. Support includes working collaboratively with the United States Geological Survey (USGS), if requested, to identify the presence of pesticides in rivers and streams across the nation. These data will allow USGS and EPA to study the patterns of exposure of agricultural and urban ecosystems to pesticides. The Analytical Chemistry

Laboratory also provides analytical assistance and technical advice to all EPA Regional Offices for use in enforcement cases and reviews and validates analytical methods or studies submitted as part of a pesticide registration.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in EPA's FY 2018 – 2022 Strategic Plan. The Microbiology Laboratory is working with the Department of Homeland Security to evaluate various materials (wood, concrete, fabric, tile, etc.) for recovery (e.g., extracting the microbe of interest) of high consequence animal pathogens (foot and mouth disease, avian influenza etc.) and the effect of decontamination technologies (including National Stockpile chemicals) on these viruses. The goal is to develop a methodology for evaluating antimicrobial pesticides against these pathogenic agents. These types of hard and porous materials are found at sites requiring remediation due to contamination with non-spore forming high consequence animal pathogens that can have a negative impact on the economy. Particular interest to the Microbiology Laboratory are methods for evaluating decontamination technologies for avian influenza (outbreaks due to migratory birds have affected the poultry industry in the United States).

The Analytical Chemistry Laboratory will continue to focus on analytical method development and validations as well as special studies to address specific short-term, rapid-turnaround priority issues. The laboratory also will continue to provide technical and analytical assistance to EPA's Enforcement and Compliance Assurance program and EPA Regional Offices in support of their enforcement cases. If requested by USGS, analytical support will continue in the sixth year of a multi-year multi agency (EPA and USGS) project to assess the quality of rivers and streams across the United States. The lab will continue to support pesticide registration review and U.S. tarp manufacturers by reviewing the permeability data of fumigants through newly manufactured tarps. In an effort to reduce emission of soil fumigants into the air, the Agency established certain buffer zone credits based on the tarps' permeability: the lower the permeability of a tarp, the lower the emission of fumigants into the air, and more fumigant remains in the soil for pest control. Thus, EPA can allow a greater buffer zone reduction credit. Pollinators are another key contributor to enhancing productivity. The Analytical Chemistry Laboratory will continue to work to understand the effects on pollinators as part of the program's existing registration and registration review processes.

**Performance Measure Targets:**

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$47.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$156.0/ - 0.9 FTE) This program change reflects a reduction for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user

fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

**Statutory Authority:**

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Endangered Species Act (ESA).

**Pesticides: Realize the Value of Pesticide Availability**

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $5,554.3 | $6,191.0 | $5,084.0 | -$1,107.0 |
| ***Science & Technology*** | ***$548.1*** | ***$571.0*** | ***$530.0*** | ***-$41.0*** |
| Total Budget Authority | $6,102.4 | $6,762.0 | $5,614.0 | -$1,148.0 |
| Total Workyears | 34.9 | 46.5 | 46.3 | -0.2 |

## Program Project Description:

The Chemical Safety and Pollution Prevention's national program laboratories make significant contributions to help the Agency realize the value of pesticides.

*EPA's Microbiology Laboratory*

The Microbiology Laboratory evaluates and develops data to support Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) Section 18 Emergency Exemption requests to combat emerging or novel pathogens such as prions, new use sites (such as those colonized by biofilms, including sinks, drains, and water lines) and also conducts applied research on new analytical methods for novel antimicrobials. In many cases of new claims or pathogens, there is no standard method for determining efficacy of a pesticide product. For example, it is recognized that microorganisms that exist as biofilm communities may be more resistant to disinfection, which can cause issues in healthcare settings. In FY 2018, the laboratory developed and released new, innovative methods for testing antimicrobial products against biofilms. These biofilm methods will open the marketplace for pesticide registrants to register antimicrobial products to control biofilms in health care settings. The laboratory has technical expertise managing unusual pathogens for which registration of a pesticide might not be economically viable under FIFRA Section 3 Registration. The evaluation of these requests is necessary in order to make pesticides available in the marketplace for these unusual or emergency situations. Examples include the H1N1 virus, prions, foot and mouth disease, Severe Acute Respiratory (SAR) infections, *Clostridium difficile, and multi-drug resistant Candida auris*. The Microbiological Laboratory also evaluates the efficacy of antimicrobials to allow EPA to remove ineffective products from the market. In addition, the Microbiology Laboratory provides technical support on numerous non-standard protocols for antimicrobials, including: foggers, chemicals used for inactivation of prions, use of citric acid for control of foot and mouth disease and evaluation of requests from other federal agencies to use paraformaldehyde for decontamination of laboratory environments.

*EPA's Analytical Chemistry Laboratory (ACB)*

The ACB Laboratory works to protect human health by developing methods and providing analytical support to EPA Regions in their investigation and enforcement of illegal and misuse of pesticide products. The Analytical Chemistry Branch (ACB) Laboratory efforts and successes resulted in standardizing the fumigation tarp protocol through the American Society for Testing and Materials (ASTM) international. They also provided tarp manufacturers with a method to test their newly manufactured tarps before submitting data to the Agency to request a buffer zone credit[22] to reduce the required buffer zone, when a fumigant is used as pest control in the field.

The ACB Laboratory supports work to protect growers from crop damage caused by application drift. Methods were developed to detect low levels of pesticides as evidence of drift and shared with EPA regional laboratories. The laboratory also provided scientific data to EPA for use in mitigating drift and volatilization of herbicides, such as Dicamba. The Laboratory continues with method development in this area, and with providing technical and analytical support to EPA Regions that are affected by drift of Dicamba products.

The ACB Laboratory works to protect human health by developing methods and providing analytical support to EPA Regions in their investigation and enforcement of illegal and misuse of pesticide products.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will realize the benefits of pesticides by operating the National Pesticide Standard Repository and conducting chemistry and efficacy testing for antimicrobials. As the recognized source for expertise in pesticide analytical method development, EPA's laboratories will continue to provide quality assurance and technical support and training to EPA's Regional Offices, state laboratories, and other federal agencies that implement FIFRA.

The Microbiology Laboratory will continue to evaluate Section 18 emergency exemptions and novel protocol requests for new uses and novel pathogens. The Analytical Chemistry Laboratory will continue its work with the IR-4 Global Study and IR-4 Crop Group Validation Study.

**Performance Measure Targets:**

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk program under the EPM appropriation.

[22] http://www.epa.gov/soil-fumigants/calculating-buffer-zones-guide-applicators.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$58.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (+$17.0/ - 0.2 FTE) This program change reflects an increase in funding for pesticide laboratory operations and maintenance activities.

**Statutory Authority:**

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA), §408.

# Research: Air and Energy

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$90,076.2*** | ***$91,282.0*** | ***$30,711.0*** | ***-$60,571.0*** |
| Total Budget Authority | $90,076.2 | $91,282.0 | $30,711.0 | -$60,571.0 |
| Total Workyears | 281.4 | 287.8 | 153.8 | -134.0 |

**Program Project Description:**

The Air and Energy (A&E) research program provides scientific information to EPA programs and regional offices. The overall research effort in EPA is organized around six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that is the result of a collaboration with, and supportive of, EPA's program and regional offices.

The resources requested for A&E will support the analysis of research data and publish scientific journal articles to disseminate findings from prior EPA air quality, emissions, and health impacts research. This program also will offer critical science support to provide essential science and tools for policy decisions and public awareness on the topics described below in the FY 2019 Activities and Performance Plan section. The A&E research program relies on successful partnerships with other EPA research programs, offices, academic and industry researchers, states, local and private sector organizations, as well as key federal agencies.

**Recent accomplishments in the A&E research program include:**

- **Reducing the Environmental Public Health Burden of Wildfires:**
  Within the last decade, wildfires have increased in frequency and intensity and now burn more than 7 million acres annually, 40 percent more than previous decades.[23] Wildland fires are a national challenge impacting public and environmental health, as well as the economy. EPA provided leadership on this issue by conducting research to improve affected communities' understanding of wildland fire emissions and provided improved air quality modeling of wildland fire plume rise, transport, and chemical evolution. This information is critical to states impacted by wildland fires in order for them to make timely decisions about fire response. EPA conducted toxicological studies to differentiate how wildland fire smoke impacts human health compared with a typical urban environment, and also how the different phases of combustion (flaming to smoldering) impact human health. This research led to the development of a Wildfire Smoke Guide[24] for public health

[23] For more information, see: http://www.nifc.gov/fireInfo/fireInfo_stats_totalFires.html.
[24] For more information, see: https://www3.epa.gov/airnow/wildfire_may2016.pdf.

officials, as well as an innovative Smoke Sense mobile application[25] for the public impacted by wildfires. The Smoke Sense application provides information on air quality and strategies to protect the users' health from smoke exposure. In the first month after its release on August 1, 2017, there have been 5,000 downloads of the application for use.[26]

- **Disparities in Public Health Impacts of Air Pollutants:**
  More than 120 million Americans live in counties with monitored air at values greater than EPA regulations for at least one criteria pollutant.[27] Some Americans experience more symptoms and health impacts related to air pollution than others. EPA scientists examined how a number of factors could affect how an individual responds to exposure to air pollution, including poverty level, lack of access to health care, education, diet, and housing. This research showed that those with cardiovascular disease who live in disadvantaged neighborhoods are more susceptible to air pollution than those living in more affluent neighborhoods.

- **NAAQS and Air Monitoring Support to State Air programs:**
  In 2016, about 40 percent of the U.S. population lived in counties with air monitored air values greater than EPA regulations for at least one criteria pollutant. EPA declared three regions in northern Utah as non-attainment areas in 2009. These areas were reclassified as "serious" non-attainment on December 16, 2016. Utilizing EPA's unique measurement capabilities and expertise, these results aided the Utah Department of Environmental Quality in developing a State Implementation Plan and informing potential control strategies to address PM2.5 NAAQS non-attainment. This research also can be applied to other states with similar pollution problems.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. The A&E program features five related topic areas that include research projects that support EPA's mission to protect human health and the environment, fulfill the Agency's legislative mandates and advance cross-agency priorities. The A&E program will continue to measure progress toward environmental health goals, and translate research results to inform communities and individuals about measures to reduce impacts of air pollution. In addition, research personnel will continue to analyze existing data from EPA air quality, emissions and health impacts research, and publish scientific journal articles to disseminate findings associated with these data. To support states and tribes, EPA will deliver state-of-the-art tools for states to use in identifying effective emission reduction strategies to meet national ambient air quality standards and enhance air quality measurement methods used to ascertain compliance with NAAQS.

[25] For more information, see: https://www3.epa.gov/air-research/smoke-sense.
[26] Number derived from internal EPA metrics.
[27] Objective 1.1 of Draft FY 2018-2022 EPA Strategic Plan.

**Performance Measure Targets:**

| (AC1) Percentage of planned research products completed on time by the Air and Energy research program. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

| (AC2) Percentage of planned research outputs delivered to clients for use in improving air quality. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

The table reflects the A&E program's annual performance measures. EPA uses these measures to assess our effectiveness in delivering needed products and outputs to clients and decision-makers at the federal government level.

EPA has established a standing subcommittee under EPA's Board of Scientific Counselors (BOSC) for the A&E program to evaluate its performance and provide feedback to the Agency. In addition, EPA meets with the BOSC and Science Advisory Board (SAB) annually for input on topics related to research program design, science quality, innovation, relevance and impact. EPA will be advised on its strategic research direction as part of the review of the Research and Development Programs' StRAPs.

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, U.S. Department of Agriculture and the White House's Office of Science and Technology Policy to assess research performance. EPA supports the interagency Science and Technology in America's Reinvestment, Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) efforts. ORD's state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies. Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of Air Pollution Control Agencies and the National Association of Clean Air Agencies.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,922.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support and benefit costs.

- (-$16,089.0/ -48.5 FTE) This program change eliminates climate change research.

- (-$32,105.0/ -85.5 FTE) This program change reduces air quality research.

- (-$10,455.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2019.

**Statutory Authority:**

Clean Air Act; Title II of Energy Independence and Security Act of 2007; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Intergovernmental Cooperation Act; National Environmental Policy Act (NEPA), § 102; Pollution Prevention Act (PPA); Global Change Research Act of 1990.

# Research: Safe and Sustainable Water Resources

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$104,687.6*** | ***$105,535.0*** | ***$67,261.0*** | ***-$38,274.0*** |
| Total Budget Authority | $104,687.6 | $105,535.0 | $67,261.0 | -$38,274.0 |
| Total Workyears | 387.7 | 403.0 | 266.4 | -136.6 |

**Program Project Description:**

The Safe and Sustainable Water Resources (SSWR) research program is developing cost-effective, innovative solutions to current, emerging, and long-term water resource challenges for complex chemical and microbial contaminants. The SSWR research program uses a systems approach to develop scientific and technological solutions for the protection of human health and watersheds. The research is being conducted in partnership with other EPA programs, federal and state agencies, academia, non-governmental agencies, public and private stakeholders, and the scientific community. This approach maximizes efficiency, interdisciplinary insights, and integration of results.

SSWR is dedicated to sustaining EPA's focus and commitment to robust research and scientific analysis to inform policy making under the authorities of the Safe Drinking Water Act and Clean Water Act. Our research supports the Office of Water in ensuring clean and safe waters through improved water infrastructure and sustainable water resource management.

The SSWR program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP)[28] that is the result of a collaboration with, and supportive of, EPA's program offices and regions.

**Recent accomplishments of the SSWR program include:**

- **Emerging contaminants:** Per- and polyfluoroalkyl substances (PFAS) contamination is of increasing concern in multiple locations across multiple states (e.g., NC, NH, NJ and WV). PFAS are widely dispersed and persistent environmental pollutants that are easily absorbed by living organisms. There is toxicological evidence that some PFAS have adverse reproductive, developmental and immunological effects.

  SSWR researchers are developing laboratory analytical methods, evaluating chemical toxicity, identifying and estimating human exposure to PFAS, identifying drinking water

[28] For more information, see: https://www.epa.gov/research/strategic-research-action-plans-2016-2019

treatment technologies and providing technical support to EPA regions and states to provide data that can be used to make informed decisions about managing PFAS.

- **Lead Treatment and Remediation:** To support the states and communities in protecting human health from the adverse outcomes of lead exposure, SSWR researchers are currently developing sampling protocols and exposure risk assessment models for lead in drinking water. Researchers also evaluated lead corrosion control treatment strategies in the field with partner utilities and 18 states[29] spanning eight EPA regions to inform implementation of the Lead and Copper Rule.

  The Agency's scientists and engineers provided their expertise and participated in EPA's Flint Drinking Water Task Force to assist the State of Michigan and the City of Flint with lead contamination and chlorine residual challenges in their drinking water system.[30] The Agency's SSWR research program contribution played a large part in helping to raise chlorine residuals by flushing hydrants, as well as determining where chlorine sampling would take place. The assistance provided by the Agency's research and development program helped Flint move toward a solution to their drinking water crisis.

- **Harmful Algal Blooms (HABs):**[31] SSWR developed the Cyanobacteria Assessment Network (CyAN) Android mobile application, which is the first platform for immediate HABs decision support for U.S. freshwater systems.[32] The CyAN mobile app delivers satellite data to the public in an accessible way that demonstrates its practical value to daily life. The CyAN mobile app is operational and providing weekly data to collaborators. It is currently available to any state regulatory agency or health department for beta testing.

- **Stormwater Management:**[33] SSWR released the Green Infrastructure Modeling Toolkit, which is comprised of five EPA models and tools for stormwater management decisions. A training video and other materials accompany the toolkit as part of EPA's Stormwater Management Guide that has over 8 thousand webpage visits. The toolkit is used by EPA to train staff and for outreach to states, as well as by land use planners and developers.

- **Recreational Water Quality:** Advances were made in the performance of quantitative, molecular methods for waterborne pathogens to provide more robust, same-day notifications of fecal contamination in recreational waters. Method performance and standardization, including developing standards for use by stakeholders, has been evaluated in eight Midwestern rivers, the National Rivers and Streams Assessment, the 2015 National Coastal Condition Assessment study,[34] and in a multi-laboratory survey examining U.S. coastal and inland surface waters.

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[29] California, Colorado, Connecticut, Florida, Illinois, Indiana, Kentucky, Maine, Michigan, Minnesota, North Carolina, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Wisconsin, and Washington, D.C.
[30] For more information, see: https://www.epa.gov/flint.
[31] For more information, see: https://cfpub.epa.gov/si/si_public_record_report.cfm?direntryid=328451.
[32] For more information, see: https://www.epa.gov/water-research/cyanobacteria-assessment-network-cyan#decision support.
[33] For more information, see: https://www.epa.gov/water-research/green-infrastructure-modeling-toolkit.
[34] For more information, see: https://www.epa.gov/national-aquatic-resource-surveys/manuals-used-national-aquatic-resource-surveys.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. The SSWR research program's work in FY 2019 will focus explicitly on efforts integral to achieving the Administrator's priorities and informing the Agency's implementation of key environmental regulations by leveraging research in areas of nutrients, harmful algal blooms, watersheds and water infrastructure (including water reuse).

High priority SSWR efforts in FY 2019 include:

- Assist states, communities, and utilities in addressing stormwater and wastewater infrastructure needs through applied models and technical assistance. In concert with the aforementioned assistance, develop risk assessments on stormwater capture for groundwater augmentation and reuse.

- Research and technical support to deliver safe drinking water. Efforts will focus on the complete water cycle–from protecting source waters and wetlands to improving drinking water and wastewater infrastructure and management. Research will assess the distribution, composition, and health impacts of known and emerging, chemical and biological contaminants.

- Improve methods for rapid and cost-effective monitoring of waterborne pathogens in recreational waters.

- Investigate health impacts from exposure to harmful algal/cyanobacteria toxins, and develop innovative methods to monitor, characterize, and predict blooms for early action.

- Support states in prioritizing watersheds for nutrient management and in setting water quality and aquatic life thresholds. These research and communication efforts will help states verify whether investments in implementing nutrient reduction management practices achieve their expected benefits.

- Provide water reuse research support for future EPA guidance on safe, fit-for-purpose potable and non-potable use by states.

**Performance Measure Targets:**

| (SW1) Percentage of planned research products completed on time by the Safe and Sustainable Water Resources research program. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

| (SW2) Percentage of planned research outputs delivered to clients and partners to improve the Agency's capability to ensure clean and adequate supplies of water that support human well-being and resilient aquatic ecosystems. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

The table reflects the SSWR program's annual performance measures. EPA uses these measures to assess its effectiveness in delivering needed products and outputs to clients (decision-makers, states, and local governments).

EPA is establishing a standing subcommittee under EPA's Board of Scientific Counselors (BOSC) for the SSWR program to evaluate its performance and provide feedback to the Agency. In addition, EPA will meet regularly with both the BOSC and the Science Advisory Board (SAB) to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on its strategic research direction as part of the review of the research and development program's StRAPs.

The Agency collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture, U.S. Geological Survey, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Department of Defense, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, and others. EPA's Office of Research and Development's (ORD's) state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators. EPA also works with the White House's Office of Science and Technology Policy and supports the interagency Science and Technology in America's Reinvestment–Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) effort.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,023.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$23,134.0/ -79.2 FTE) This program change streamlines funding to the program for research related to technical support and site-specific support; communication and technology transfer efforts; translation of nutrient modeling and monitoring data; and research assisting states to prioritize watersheds and differentiating sources of nutrient overloading.

- (-$12,752.0/ -57.4 FTE) This program change refocuses resources from research on recovering resources (e.g. nutrients) from wastewater, transformative water systems, life cycle analysis, and research on advancing water systems technologies for FY 2019.

- (-$3,411.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2019.

**Statutory Authority:**

Safe Drinking Water Act (SDWA), § 1442(a)(1); Clean Water Act, §§ 101(a)(6), 104, 105; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Marine Protection, Research, and Sanctuaries Act (MPRSA), § 203; Title II of Ocean Dumping Ban Act of 1988 (ODBA); Water Resources Development Act (WRDA); Wet Weather Water Quality Act of 2000; Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA); National Invasive Species Act; Coastal Zone Amendments Reauthorization Act (CZARA); Coastal Wetlands Planning, Protection and Restoration Act; Endangered Species Act (ESA); North American Wetlands Conservation Act; Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Toxic Substances Control Act (TSCA).

## Research: Sustainable Communities

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$142,429.1*** | ***$133,415.0*** | ***$52,549.0*** | ***-$80,866.0*** |
| Leaking Underground Storage Tanks | $358.0 | $318.0 | $320.0 | $2.0 |
| Inland Oil Spill Programs | $653.4 | $659.0 | $516.0 | -$143.0 |
| Hazardous Substance Superfund | $12,717.6 | $11,385.0 | $10,885.0 | -$500.0 |
| Total Budget Authority | $156,158.1 | $145,777.0 | $64,270.0 | -$81,507.0 |
| Total Workyears | 459.7 | 476.3 | 294.1 | -182.2 |

**Program Project Description:**

EPA's Sustainable and Healthy Communities (SHC) research program supplies research to support regulatory activities, including protocol development for the National Contingency Plan, and provides on-demand technical support at federal, tribal or state-led cleanup sites and during emergencies. SHC's research products are unique in that they account for the interrelationships between social, economic, health, ecological, and environmental factors.

Program scientists conduct health, environmental engineering, and ecological research and translate these into planning and analysis tools for localities throughout the United States to facilitate regulatory compliance and improve environmental and health outcomes. These tools aim to minimize negative unintended consequences to human health and the environment and promote more robust and efficient infrastructure in built and natural environments.

The overall research effort is organized around six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that is the result of a collaboration with, and supportive of, EPAs program and regional offices.

**Recent accomplishments of the SHC program include:**

- **Lead Exposure Estimates in Children:** In light of recent concerns about lead (Pb) contamination, SHC researchers devised a modeling approach to estimate how various sources (drinking water, food, dust, soil, and air) contribute to blood lead levels in infants and young children. Findings present "…a state-of-the-science methodology that can guide a health-based benchmark for Pb in drinking water and also can be applied to other media."[35] By improving lead exposure estimates for its primary sources, the work can guide

[35] "Children's Lead Exposure: A Multimedia Modeling Analysis to Guide Public Health Decision-Making", https://ehp.niehs.nih.gov/ehp1605/?utm_source=rss&utm_medium=rss&utm_campaign=ehp1605.

national and local public health decisions and actions aimed at minimizing total lead exposure.

- **Developing Guidelines for Evaluating the Post-Closure Care (PCC) Period for Hazardous Waste Disposal Facilities:** SHC is evaluating data from eight landfills located throughout the United States that are nearing the end of their 30-year PCC period to quantify the field performance of engineered containment systems. Results – which were finalized in October 2017 – will form the basis for technical guidance to evaluate performance of Resource Conservation and Recovery Act (RCRA) Subtitle C hazardous waste landfills.

- **Adding Six New Metropolitan Areas to *EnviroAtlas*:** *EnviroAtlas*[36] –an interactive online mapping system that displays layers of information on environmental quality, health statistics, and socio-economic factors in specific communities– provides local leaders with high resolution data to inform decision making. In 2016, SHC added the metropolitan areas around and including Austin, TX, Cleveland, OH, Des Moines, IA, Memphis, TN, Minneapolis, MN and New York, NY to the Atlas. High-resolution data for New Haven, CT, Baltimore, MD, Birmingham, AL, Chicago, IL, Norfolk, VA, and Brownsville, TX was released in October of 2017.[37] The addition of these cities will bring the number of *EnviroAtlas* metropolitan areas to 24, comprising well over 500 cities and towns, with another 12 areas planned for inclusion by the end of FY 2019.[38]

- **Mapping Private Wells and Site Densities of Leaking Underground Storage Tanks:** State agencies need to identify locations with private wells as a part of the process for conducting site investigations for leaking underground storage tanks and frequently lack the information they need. To help states prioritize their efforts, SHC scientists developed a methodology using available data from Oklahoma that illustrates how to develop estimates of areas of high private well use and tank locations. Continuing work is expected to expand these estimates to the entire United States and increase the resolution of the estimates.

- **Organic Waste Diversion in Columbia, SC:** A group of interested stakeholders have formed a partnership in the region to explore ways to regionally manage their organic materials. To aid this effort, SHC scientists have compiled integrated management strategies that divert organic materials into other beneficial uses, using Columbia, SC as a case study. The stakeholders represented in this partnership include both sources and potential receptors of organic waste, such as the U.S. Army Fort Jackson – the largest and most active initial entry training center in the U.S. Army. Results of this study will be broadly available to other communities facing organic waste issues.

- **Report on bioavailability methods for assessing potential lead exposures of concern to communities from urban contamination:** Lead has long been a concern for children's health, but the risk from lead can vary among the forms of lead present in the environment.

[36] For more information, see: https://www.epa.gov/enviroatlas.
[37] For more information, see: https://www.epa.gov/enviroatlas/municipalities-within-enviroatlas-boundaries.
[38] For more information, see: https://www.epa.gov/sites/production/files/2016-07/documents/cominbnd_2016_may.pdf.

Research by SHC scientists indicates that the bioavailability of lead poses a greater risk than the total soil lead concentrations. This distinction has important implications for remediating lead contamination and assessing risk at a given site.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. More specifically, SHC's FY 2019 research will focus explicitly on conducting research to support regulatory activities and protocol development for the National Oil and Hazardous Substances Pollution Contingency Plan and provide on-demand technical support at federal-, tribal-, or state-managed cleanup sites, as well as assistance during emergencies. The Agency conducts health, environmental engineering, and ecological research and prepares planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes. EPA scientists also will assess the impact of pollution (e.g. health impact assessments) on such vulnerable groups as children, tribes, environmental justice communities, and other susceptible populations.

Resources will support the research personnel who analyze existing research data and publish scientific journal articles to disseminate findings associated with the data. Research efforts will include *EnviroAtlas* (a web-based atlas of ecosystem services), conducting valuation of ecosystem services, studying how ecosystem services impact human health, measuring impact on vulnerable populations (e.g. children), and the remediation of contaminated sites.

**Performance Measure Targets:**

| **(HC1) Percentage of planned research products completed on time by the Sustainable and Healthy Communities research program.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 100 | 100 |

| **(HC2) Percentage of planned research outputs delivered to clients, partners, and stakeholders for use in pursuing their sustainability goals.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 100 | 100 |

The table reflects the SHC program's annual performance measures. EPA uses these measures to assess our effectiveness in delivering needed products and outputs to clients (decision-makers, states, and local governments).

EPA has a standing subcommittee under ORD's Board of Scientific Counselors (BOSC) for the SHC program to evaluate its performance and provide feedback to the Agency. The SHC program will meet regularly with both the BOSC and Science Advisory Board over the next several years to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on its strategic research direction midway through the 4-year cycle of StRAPs.

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, U.S. Department of Agriculture and the White House's Office of Science and Technology Policy (OSTP) to assess research performance. EPA's Office of Research and

Development's (ORD's) state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials. EPA supports the interagency Science and Technology in America's Reinvestment, Measuring Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) efforts.[39]

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$2,458.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$34,423.0/ -90.1 FTE) This program change streamlines research support in FY 2019 by eliminating work related to the following activities:

    - The Ecotox database;
    - EPA's Report on the Environment (ROE); and
    - The inclusion of a data layer in *EnviroAtlas* on ecosystem services and their beneficiaries.

- (-$16,235.0/ -51.6 FTE) This program change streamlines research efforts across environmental media by eliminating work related to:

    - Research on the life cycle of materials in commerce; and
    - The People, Prosperity, and the Planet (P3) program for college-level competition.

- (-$19,227.0/ -40.5 FTE) This program change streamlines research on the following:

    - The Health Impact Assessment (HIA) approach for assessing the impact of major planned infrastructure development (e.g. highway construction) at a city scale of governance;
    - Research into the mechanisms of chemical exposures and effects on human health outcomes and well-being, especially research into cumulative effects;
    - Research into the uptake and distribution of contaminates (e.g., lead, arsenic) within vulnerable populations; and
    - Research into the environmental component of children's asthma.

- (-$8,523.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2019.

[39] STAR METRICS: https://www.starmetrics.nih.gov/.

**Statutory Authority:**

Clean Air Act (CAA); Clean Water Act (CWA); Clinger Cohen Act; Coastal Zone Management Act (CZMA); Environmental Research, Development & Demonstration Authorization Act (ERDDAA); Endangered Species Act (ESA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Food Quality and Protection Act (FQPA); Intergovernmental Cooperation Act; Marine Protection, Research and Sanctuaries Act; National Environmental Education Act; National Environmental Policy Act (NEPA); Toxic Substances Control Act, as amended by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act* ; Water Resources Research Act.

# Research: Chemical Safety and Sustainability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$89,192.6*** | ***$88,514.0*** | ***$61,737.0*** | ***-$26,777.0*** |
| Total Budget Authority | $89,192.6 | $88,514.0 | $61,737.0 | -$26,777.0 |
| Total Workyears | 308.6 | 307.7 | 240.9 | -66.8 |

**Program Project Description:**

EPA's Chemical Safety for Sustainability (CSS) research program provides information, tools and methods to make better-informed, more-timely decisions about the thousands of chemicals circulating in the United States. CSS products strengthen the Agency's ability to evaluate and predict human health and ecological impacts from the use and disposal of manufactured chemicals.

The CSS program works with multiple EPA program offices to plan and develop innovative research that directly addresses Agency challenges and informs Agency decisions regarding chemicals. Products delivered by the CSS program inform the implementation of multiple Agency programs including the evaluation of existing and new chemicals (TSCA), development and use of alternative testing protocols (TSCA), chemical prioritization (TSCA, SDWA), evaluation of pesticide registrations (FIFRA), and mitigation activity at Superfund sites (CERCLA).

The CSS program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that is the result of a collaboration with, and supportive of, EPA's program and regional offices.

**Recent accomplishments include:**

- **Public release of the interactive Chemistry Dashboard[40]:** The CSS research program released a new interactive Chemistry Dashboard with chemistry information for over 700,000 chemicals. The Chemistry Dashboard is a gateway to an array of related public domain databases and serves as a hub that links together many EPA databases, providing improved access to data and models for chemicals of interest. The Chemistry Dashboard provides a one-stop-shop for chemical properties, structure, exposure and toxicity information that inform chemical exposure and risk evaluations and assessments by the Agency and outside researchers. A new version of the dashboard was released in August 2017, and includes new lists of toxins, increased amounts of toxicity value data, enhanced

[40] Interactive Chemistry Dashboard accessible here: https://comptox.epa.gov/dashboard/.

performance of searches, and millions of new predicted data points from the Toxicity Estimation Software Tool (TEST).

- **Improved Characterization of Chemical Exposure:** CSS research has enhanced the capacity to rapidly generate quantitative human exposure and internal dose predictions for large numbers of chemicals. CSS efforts are providing curated chemical monitoring, consumer product ingredient, ingredient function, and product usage information through a publicly accessible, web-based platform. The chemicals in consumer products database (CPDat)[41] and the Human Exposure Model (HEM)[42] are two examples of the tools being developed to better inform total chemical exposures. These tools also are providing efficient evaluation of ecological exposure and risk in support of EPA's Endangered Species Protection program and the Pesticide Registration process.[43]

- **Public release of the Sequence Alignment to Predict Across Species Susceptibility (SeqAPASS) tool[44]:** SeqAPASS helps fill regulators' knowledge gaps faster and cheaper by comparing and extrapolating toxicity information across species. This tool has proven to be extremely valuable in evaluating risks of exposures from pesticides and pharmaceuticals in wildlife species. The most recent version of the SeqAPASS tool was released in May 2017.

- **Improved definition of unknown chemicals:** CSS investigators have developed advanced analytical and computational tools to detect and identify unknown chemicals in environmental media, biological media and consumer products. Using high-resolution mass spectrometry (MS), it is now possible to translate unknown MS features into "tentative", "probable" and "confirmed" chemical structures and then identify specific chemicals.

- **Evaluating engineered nanomaterials:** CSS investments in the study of nanomaterials have made it possible to develop a comprehensive framework for evaluating the environmental health and safety of engineered nanomaterials. This framework was presented in a review paper published in June 2017 in the journal, *Critical Reviews in Toxicology*.[45] This framework will help evaluations of health and safety impacts of the release of engineered nanomaterials into the environment in an array of applications including antimicrobials, sun screens, and wood preservatives.

In addition to these specific accomplishments, CSS continues to work with the Agency's Chemical Safety and Pollution Prevention program, providing dedicated staff for the successful implementation of TSCA as amended by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act*. CSS contributes data and tools information for the development of chemical prioritization approaches and provides joint leadership for the development of the TSCA

[41] The CPDat database is linked to the interactive Chemistry Dashboard.
[42] The Beta version of the Human Exposure Model is scheduled to be released internal to EPA at the end of FY2017 and will be refined based upon input from OPPT.
[43] For more information, see: https://www.epa.gov/pesticide-registration/about-pesticide-registration.
[44] For more information, see: https://blog.epa.gov/blog/tag/seqapass/. Login here: https://seqapass.epa.gov/seqapass/.
[45] A comprehensive framework for evaluating the environmental health and safety implications of engineered nanomaterials. Link: http://www.tandfonline.com/doi/full/10.1080/10408444.2017.1328400.

alternative toxicity testing strategies paper. TSCA requires that the strategies paper be completed by June 2018.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the CSS research program will continue to produce innovative tools that accelerate the pace of data-driven chemical evaluations, enable EPA and state decisions to be environmentally sound, protective of public health, and support sustainable innovation of chemicals. This work will focus explicitly on efforts integral to achieving the Administrator's priorities. In FY 2019, CSS products will continue to inform the Agency's implementation of key environmental regulations by leveraging research in areas of computational toxicology, rapid exposure and dosimetry, endocrine disrupting chemicals, and emerging materials (such as nanomaterials).

**Computational Toxicology (CompTox):** EPA continues to be a leader in developing innovative computational and high-throughput methods for efficiently screening large numbers of chemicals in a shorter amount of time, costing less and using fewer vertebrate animals for toxicity testing. In FY 2019, CompTox research will provide essential support to Agency activities across diverse regulatory frameworks (e.g., TSCA, FIFRA, SDWA) and multiple EPA program offices. Development and application of new assessment methodologies add significant efficiency and effectiveness to Agency operations and also provide states with the information to support effective decisions and actions. Specific CompTox activities in FY 2019 include:

- Using ToxCast/Tox21 data to develop high-throughput risk assessments, in particular for chemicals for which adequate information has not been available historically to conduct risk assessments.

- Developing and releasing online software tools to transparently provide information on thousands of chemicals and integrate human health, environmental, and exposure data for a range of decisions, including chemical prioritization decisions.

- Exploring how high-throughput exposure and hazard information can be combined to predict potential for exposure and risk to susceptible subpopulations.

CSS research activities in computational toxicology directly support efforts of the Agency in fulfilling requirements for: chemical evaluation under TSCA, as amended by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act*; pesticide evaluation under FIFRA; chemical testing for endocrine system impacts under the Food Quality Protection Act of 1996 (FQPA) (Public Law 104-170); and chemical evaluation as part of SDWA.

**Rapid Exposure and Dosimetry:** In FY 2019, the CSS program will continue to provide data, models and tools to characterize total human exposure to environmental chemicals. Human exposure information informs Agency chemical evaluations (such as those conducted in support of TSCA and FIFRA) and chemical prioritizations. This includes the continued development of

advanced analytical and computational tools to detect and identify unknown chemicals in environmental media, biological media and consumer products.

**Endocrine Disrupting Chemicals, Emerging Materials and Nanotechnology:** CSS will continue to develop and evaluate improved methods to test for impacts on androgen receptors, estrogen receptors, steroidogenesis and thyroid function in support of its core statutory requirements under the FQPA. In addition, CSS will continue to work with OCSPP to define what research is needed on nanomaterials to support the implementation of TSCA.

**Performance Measure Targets:**

| (CS1) Percentage of planned research products completed on time by the Chemical Safety for Sustainability research program. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

| (CS2) Percentage of planned research outputs delivered to clients and partners to improve their capability to advance the environmentally sustainable development, use, and assessment of chemicals. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

The table reflects the CSS research program's annual performance measures. EPA uses these measures to assess its effectiveness in delivering needed products and outputs to clients (decision-makers, state, and local governments).

EPA has established a standing subcommittee under EPA's Board of Scientific Councilors (BOSC) for the CSS program to evaluate the research dimensions of the CSS program as part of its performance and provide feedback to the Agency. EPA will meet regularly with the BOSC and Science Advisory Board to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on its strategic research direction as part of the review of the research and development program's StRAPs.[46]

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, U.S. Department of Agriculture and the White House's Office of Science and Technology Policy to assess research performance. EPA's Office of Research and Development's (ORD) state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials. EPA supports the interagency Science and Technology in America's Reinvestment—Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) effort. This interagency effort is helping EPA to more effectively measure the impact federal science investments have on society, the environment, and the economy.[47]

[46] EPA Strategic Research Action Plans: http://www.epa.gov/research/strategic-research-action-plans-2016-2019.
[47] STAR METRICS: https://www.starmetrics.nih.gov/.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,116.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$3,945.0/ -13.1 FTE) This program change reduces resources for the development of high-throughput toxicity testing and the Agency's development of improved methods for chemical evaluations.

- (-$3,498.0/ -10.7 FTE) This program change reduces research efforts focused on endocrine disrupting chemicals under this program.

- (-$14,555.0/ -45.0 FTE) This program change reduces funding for the development of virtual tissue models and tools that potentially can be used to conduct chemical toxicity screening to understand impacts on human development and health outcomes, while minimizing the use of animal testing.

- (-$5,895.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2019.

- (+2.0 FTE) The realignment of FTE from appropriated Chemical Risk Review and Reduction FTE to TSCA user fee collections results in an increase of 2.0 FTE. Resources have been realigned from the Office of Chemical Safety and Pollution Prevention's Chemical Risk Review and Reduction program to the Office of Research and Development's Chemical Safety and Sustainability program to support risk assessment and evaluation science to support new TSCA requirements.

**Statutory Authority:**

Clean Air Act §§ 103, 104, 154; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Children's Health Act; 21st Century Nanotechnology Research and Development Act; Clean Water Act, §§ 101-121; Environmental Research, Development and Demonstration Authorization Act of 1976 (ERDDAA); Federal Food, Drug, and Cosmetic Act (FFDCA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Food Quality Protection Act (FQPA); Intergovernmental Cooperation Act; National Environmental Policy Act (NEPA), § 102; Pollution Prevention Act (PPA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA) as amended by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act*.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Science & Technology*** | ***$40,506.5*** | ***$37,554.0*** | ***$22,267.0*** | ***-$15,287.0*** |
| Hazardous Substance Superfund | $3,020.5 | $2,805.0 | $5,021.0 | $2,216.0 |
| Total Budget Authority | $43,527.0 | $40,359.0 | $27,288.0 | -$13,071.0 |
| Total Workyears | 169.2 | 177.6 | 111.6 | -66.0 |

**Program Project Description:**

EPA's Human Health Risk Assessment (HHRA) research program is focused on the science of assessments that inform decisions made by EPA and its partners, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws, including the Clean Air Act (CAA), Clean Water Act (CWA), Safe Drinking Water Act (SDWA), Toxic Substances Control Act (TSCA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The current portfolio of HHRA products include:

***Integrated Risk Information System (IRIS):*** IRIS risk assessments are used by EPA and other health agencies to inform national standards, clean-up levels at local sites, and set advisory levels. These risk assessments inform decisions under the CAA, CWA, SDWA, CERCLA/Superfund, and TSCA. The IRIS Program utilizes a multi-step process which provides opportunities for public, stakeholder, and interagency engagement. The assessments are complex, multidisciplinary evaluations of scientific information, which are developed through a transparent process with independent peer review. IRIS is the only federal program to provide toxicity values for both cancer and non-cancer effects.

***Integrated Science Assessments (ISAs):*** Provide a concise evaluation and synthesis of science necessary to support decisions to retain or revise the National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants (particulate matter, ozone, lead, sulfur oxides, nitrogen oxides, and carbon monoxide) as required every five years by sections 108(a)(2) and 109(d)(1) of the Clean Air Act.[48] ISAs also inform the benefit-cost analyses that support the regulations designed to allow states and local areas to meet the NAAQS.

***Community and Site-specific Risk*:** Develop Provisional Peer-Reviewed Toxicity Values (PPRTVs) and exposure assessment tools to help inform EPA's timely response to contaminated

[48] For more information, see: https://www.epa.gov/clean-air-act-overview/clean-air-act-title-i-air-pollution-prevention-and-control-parts-through-d#ia.

Superfund and hazardous waste sites, as required by the CERCLA.[49] PPRTVs are typically developed for data poor chemicals for which no IRIS value exists.

***Research to Advance Risk Assessment Methods:*** Develop tools and methods that support the scientific advances in assessments. This includes research to incorporate non-animal testing data into assessments. It also includes research on assessment methods for emerging contaminants such as perfluorinated compounds and biotechnologies.

The HHRA research program anticipates developing new assessment approaches by means of an expanded product line to enhance rapid response and screening capabilities and to augment toxicity value derivation procedures for health assessments.

**Recent accomplishments in the HHRA research program include:**

Recent accomplishments in the HHRA research program include the 2017 GAO High Risk report, which noted significant improvement in their high risk criteria ratings specific to the IRIS program.

***Responsiveness in the Development of HHRA Deliverables***

To support TSCA, a systematic review protocol as well as a draft document containing a preliminary hazard evaluation for hexabromocyclododecane (HBCD) was delivered to the Agency's Chemical Safety and Pollution Prevention program to support their risk evaluation. HBCD is one of the first ten chemicals designated to be evaluated under TSCA.

Final ***IRIS assessments*** for Ethylene Oxide, and Benzo(a)pyrene were completed; and draft IRIS assessments for Ethyl tert-Butyl Ether (ETBE), and tert-Butyl Alcohol (TBA) were released to the Science Advisory Board (SAB) for independent, external peer review.

***ISA chapters*** were developed for two final Integrated Review Plans (IRPs): one to support the primary and secondary NAAQS review for particulate matter and another to support the secondary NAAQS review for oxides of nitrogen and sulfur. In addition, the final ISA for Oxides of Sulfur – Health Criteria to support the primary NAAQS for SO2 was issued in December 2017.

HHRA continues to provide ongoing technical support for EPA's human health and ecological risk assessment program, delivered 12 high priority ***PPRTV assessments*** in FY 2017, and is planning to deliver a similar number by the end of FY 2018.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 – 2022 Strategic Plan. The HHRA research program's work in FY 2019 will focus explicitly on efforts integral to achieving the Administrator's priorities and informing the Agency's implementation of key environmental regulations. Examples of this work include:

[49] See, 42 U.S.C. Sec. 9601 *et seq.*: http://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter103&edition=prelim#9601_5_target.

- **Support the Agency's Implementation of TSCA:** Provide scientific products and support required for TSCA implementation to the Agency's Chemical Safety and Pollution Prevention program. This will include support for risk evaluations of the first 10 TSCA chemicals (Designation of Ten Chemical Substances for Initial Risk Evaluations Under the Toxic Substances Control Act, 81 FR 91927), through to completion in FY 2019, as well as any additional chemicals identified for the pipeline of TSCA risk evaluations [TSCA section 6(b)(2)]. The program will continue its efforts to maintain and improve support of TSCA implementation.

- **Support the Agency's Implementation of the Safe Drinking Water Act:** Provide research and technical support to the Water program. Specifically, in support of the Safe Drinking Water and Clean Water Acts, HHRA will focus on evaluating health impacts from exposure to known and emerging, chemical and biological contaminants under the authorities of SDWA.

- **Support the Agency's Implementation of the Clean Air Act:**
  - Provide the scientific products and support to the Agency's Air and Radiation program to conduct Risk and Technology Reviews under Title III of the Clean Air Act.
  - Provide ISAs to support decisions to retain or revise the NAAQS for six criteria air pollutants as required every five years by the Clean Air Act. ISAs also inform analyses by state and local officials, including benefit-cost analyses, to support implementation of air quality management programs.

- **Targeted support for program and regional offices, and states and tribes:** Develop a portfolio of products that optimize the application of best available science and technology, with an increased focus on the specific decision needs. These more targeted assessments will promote greater throughput, and will be shaped for use by several partners, including the states, tribes, other federal agencies, and EPA's national and regional program offices.

- **Support Superfund:** Provide risk assessments, Provisional Peer-Reviewed Toxicity Values (PPRTVs), and advanced exposure assessment tools as well as provide technical support to help inform EPA's clean-up decisions at contaminated Superfund, Brownfields, and hazardous waste sites, as required by RCRA and CERCLA.

- **Human and Ecological Risk Assessments:** Provide localized technical assistance and scientific expertise on human and ecological risk assessments to states, tribes, regions and programs. This includes direct support in cases of emergencies and other rapid response situations.

In addition, the Agency is currently reviewing IRIS to ensure it supports the Agency's highest public health decision-making, and its role in supporting the TSCA program, while continuing to support all of EPA's programs. Examples of modifications to IRIS include:

- The implementation of systematic review to ensure risk assessments are complete, unbiased, reproducible and transparent; and

- Moving from traditional IRIS assessments to "fit-for-purpose" products to ensure risk assessments remains responsive to stakeholders/partners.

**Performance Measure Targets:**

| (RA1) Percentage of planned research products completed on time by the Human Health Risk Assessment research program. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

| (RA2) Percentage of planned research outputs delivered to clients and partners for use in informing human health decisions. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100 | 100 |

| (RD2) Number of peer-reviewed journal articles with datasets cleared for publication. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 336 | 336 |

| (RD1) Number of Office of Research and Development (ORD) research products meeting customer needs. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | No Target Established | TBD |

| (RA8) Annual progress score for finalizing IRIS health assessments, Provisional Peer-Reviewed Toxicity Values, and Integrated Science Assessments. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 5 | 5 |

The table above reflects the HHRA research program's annual performance measures. EPA uses these measures to assess our effectiveness in delivering needed products and outputs to clients (decision-makers, states, and local governments).

ORD's state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies. Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, the Association of State and Territorial Health Officials as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

EPA has established a standing subcommittee under EPA's Board of Scientific Counselors (BOSC) for the Chemical Safety for Sustainability and Human Health Risk Assessment National Research Programs that will be utilized to evaluate the HHRA program as part of its performance and provide feedback to the Agency. EPA will meet regularly with the BOSC for input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on developing its strategic research direction and Strategic Research Action Plans for FY 2019-2022.

EPA collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, the National Science Foundation, the

Department of Energy, and the United States Department of Agriculture. The Agency also will work with the White House's Office of Science and Technology Policy. EPA supports the interagency Science and Technology in America's Reinvestment—Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) effort. This interagency effort is helping EPA to more effectively measure the impact federal science investments have on society, the environment, and the economy.[50]

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$937.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$13,907.0/ -65.5 FTE) This program change:

    - Significantly reduces the HHRA research program's ability to develop assessments to support Agency decisions, which will not only impact the number of FTEs, but also the composition of the multidisciplinary teams assembled to address the needs of complex Agency decisions.
    - Reduces the HHRA research program's ability to provide daily technical support to program and regional offices and states and tribes, including during emergencies and urgent circumstances.

- (-$2,317.0/ -15.2 FTE) Resources are being rebalanced to the Superfund appropriation within this program for IRIS.

**Statutory Authority:**

CAA Amendments, 42 U.S.C. 7403 et seq. - Sections 103, 108, 109, and 112; CERCLA (Superfund, 1980) Section 209(a) of Public Law 99-499; CWA Title I, Sec. 101(a)(6) 33 U.S.C. 1254 – Sec 104 (a) and (c) and Sec. 105; ERDDA 33 U.S.C. 1251 – Section 2(a); FIFRA (7 U.S.C. s/s 136 et seq. (1996), as amended), Sec. 3(c)(2)(A); FQPA PL 104-170; SDWA (1996) 42 U.S.C. Section 300j-18; TSCA (Public Law 94-469): 15 U.S.C. s/s 2601 et seq. (1976), Sec. 4(b)(1)(B), Sec. 4(b)(2)(B).

[50] STAR METRICS: https://www.starmetrics.nih.gov/.

# Water: Human Health Protection

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $95,917.2 | $96,200.0 | $80,543.0 | -$15,657.0 |
| ***Science & Technology*** | ***$3,517.0*** | ***$3,495.0*** | ***$3,595.0*** | ***$100.0*** |
| Total Budget Authority | $99,434.2 | $99,695.0 | $84,138.0 | -$15,557.0 |
| Total Workyears | 505.3 | 522.7 | 443.3 | -79.4 |

**Program Project Description:**

The Drinking Water Technical Support Center leads the collection of national occurrence data for unregulated contaminants in drinking water; develops and evaluates analytical methods that are used to monitor drinking water contaminants accurately and reliably; leads the national program under which laboratories are certified to conduct the analyses of water contaminants with designated analytical methods; and works with states and public water systems collaboratively to implement tools that help systems achieve performance and optimization practices that maximize technical capacity while reducing operational costs.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan.

In FY 2019, EPA's Drinking Water Technical Support Center will continue to carry out the following activities:

- Lead the development, revision, evaluation, and approval of chemical and microbiological analytical methods for unregulated and regulated contaminants to assess and ensure protection of public health from contaminants in drinking water (e.g., toxins resulting from harmful algal blooms, and Polyfluoroalkyl Substances (PFAS)).
- Implement EPA's Drinking Water Laboratory Certification Program[51], which sets direction for oversight of municipal and commercial laboratories that analyze drinking water samples. Conduct three regional program reviews during FY 2019 and deliver two certification officer training courses (for chemistry and microbiology) for state and regional representatives to ensure the quality of the analytical results.
- Partner with states and water systems to optimize their treatment technology under the drinking water Area Wide Optimization Program (AWOP)[52]. The AWOP is a highly successful technical/compliance assistance and training program that enhances the ability

[51] https://www.epa.gov/dwlabcert.
[52] https://www.epa.gov/dwstandardsregulations/optimization-program-drinking-water-systems.

of small systems to meet existing microbial, disinfectant, and disinfection byproduct standards, and also addresses distribution system integrity and water quality issues. During FY 2019, EPA expects to work with states and tribes to teach them how to identify performance limiting factors at public water systems, and develop and apply tailored tools to help these public water systems overcome operational challenges, achieve performance and optimization levels, and reduce health-based compliance challenges.

- Continue monitoring under the fourth Unregulated Contaminant Monitoring Rule (UCMR 4). The UCMR 4 was published in December 2016, and addresses collection of data on occurrence of 30 contaminants of interest (e.g., cyanotoxins, disinfection by-products (DBPs), pesticides) to assess the frequency and levels at which these contaminants are found in public water systems. The UCMR 4 is a federal direct implementation program coordinated by EPA, as directed by the Safe Drinking Water Act. The data collected are used by EPA as part of the Agency's determination of whether to establish health-based standards to protect public health. Monitoring activities for UCMR 4 will occur between FY 2018 and FY 2021. Key activities for EPA include ensuring laboratories are available to perform the required analyses, managing the field sample collection and sample analysis for small systems, and managing data reporting by large systems. In addition, EPA makes the data available to our state and tribal partners and to the general public.

**Performance Measure Targets:**

Work under this program supports performance results in Drinking Water Programs under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$291.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$191.0/ -2.1 FTE) This program change reflects a reduction to the Drinking Water Program and streamlining of activities.

**Statutory Authority:**

Safe Drinking Water Act (SDWA).

# Congressional Priorities

**Water Quality Research and Support Grants**
Program Area: Congressional Priorities
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $12,688.0 | $12,614.0 | $0.0 | -$12,614.0 |
| ***Science & Technology*** | ***$7,803.4*** | ***$4,072.0*** | ***$0.0*** | ***-$4,072.0*** |
| Total Budget Authority | $20,491.4 | $16,686.0 | $0.0 | -$16,686.0 |

**Program Project Description:**

In FY 2017, Congress appropriated $4.1 million in the Science and Technology appropriation to fund high priority water quality and water availability research. EPA was instructed to award grants on a competitive basis, independent of the Science to Achieve Results (STAR) program, and give priority to not-for-profit organizations that: conduct activities that are national in scope; can provide a twenty-five percent match, including in-kind contributions; and often partner with the Agency.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$4,072.0) This funding change eliminates this program as part of the effort to limit federal investment in lower priority activities and to focus resources on core environmental work.

**Statutory Authority:**

CAA 42 U.S.C. 7401 et seq. Title 1, Part A – Sec. 103 (a) and (d) and Sec. 104 (c); CAA 42 U.S.C. 7402(b) Section 102; CAA 42 U.S.C. 7403(b)(2) Section 103(b)(2); Clinger Cohen Act, 40 U.S.C. 11318; CERCLA (Superfund, 1980) Section 209(a) of Public Law 99-499; Children's Health Act; CWA, Sec. 101 - 121; CWPPRA; CZARA; CZMA 16 U.S.C. 1451 - Section 302; Economy Act, 31 U.S.C. 1535; EISA, Title II Subtitle B; ERDDA, 33 U.S.C. 1251 – Section 2(a); ESA, 16 U.S.C. 1531 - Section 2; FFDCA, 21 U.S.C. Sec. 346; FIFRA (7 U.S.C. s/s 136 et seq. (1996), as amended), Sec. 3(c)(2)(A); FQPA PL 104-170; Intergovernmental Cooperation Act, 31 U.S.C. 6502; MPRSA Sec. 203, 33 U.S.C. 1443; NAWCA; NCPA; National Environmental Education Act, 20 U.S.C. 5503(b)(3) and (b)(11); NEPA of 1969, Section 102; NISA; ODBA Title II; PPA, 42 U.S.C. 13103; RCRA; SDWA (1996) 42 U.S.C. Section 300j-18; SDWA Part E, Sec. 1442

(a)(1); TSCA, Section 10, 15, 26, U.S.C. 2609; USGCRA 15 U.S.C. 2921; WRDA; WRRA; and WWWQA.

**Environmental Protection Agency**
**2019 Annual Performance Plan and Congressional Justification**

**Table of Contents – Environmental Programs and Management**

**APPROPRIATION: Environmental Programs & Management**

**Resource Summary Table**

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Environmental Program & Management** | | | | |
| Budget Authority | $2,639,159.5 | $2,602,009.0 | $1,738,852.0 | -$863,157.0 |
| Total Workyears | 9,368.4 | 9,758.2 | 7,331.6 | -2,426.6 |

## Bill Language: Environmental Programs and Management

*For environmental programs and management, including necessary expenses, not otherwise provided for, for personnel and related costs and travel expenses; hire of passenger motor vehicles; hire, maintenance, and operation of aircraft; purchase of reprints; library memberships in societies or associations which issue publications to members only or at a price to members lower than to subscribers who are not members; administrative costs of the brownfields program under the Small Business Liability Relief and Brownfields Revitalization Act of 2002; and not to exceed $19,000 for official reception and representation expenses, $1,738,852,000, to remain available until September 30, 2020: Provided, That of the amounts provided under this heading, the Chemical Risk Review and Reduction program project shall be allocated for this fiscal year, excluding the amount of any fees made available, not less than the amount of appropriations for that program project for fiscal year 2014.*

*In addition, $46,000,000, to remain available until September 30, 2020, for necessary expenses of the Energy Star program established by section 324A of The Energy Policy and Conservation Act (42 U.S.C. 6294a): Provided, That the Administrator of the Environmental Protection Agency shall collect fees pursuant to section 324A(e) (42 U.S.C. 6294a(e)), as added by this Act, and such fees shall be credited to this appropriation as offsetting collections: Provided further, That the sum herein appropriated in this paragraph from the general fund shall be reduced as such collections are received during fiscal year 2019 so as to result in a final fiscal year appropriation from the general fund estimated at $0: Provided further, That to the extent such collections received in fiscal year 2019 exceed $46,000,000, those excess amounts shall be deposited in the general fund.*

## Program Projects in EPM
(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Clean Air | | | | |
| Clean Air Allowance Trading Programs | $15,236.6 | $16,060.0 | $12,574.0 | -$3,486.0 |
| Atmospheric Protection Program | $89,143.7 | $94,788.0 | $13,542.0 | -$81,246.0 |
| Federal Stationary Source Regulations | $20,282.9 | $21,736.0 | $16,898.0 | -$4,838.0 |
| Federal Support for Air Quality Management | $127,113.4 | $125,387.0 | $96,097.0 | -$29,290.0 |
| Stratospheric Ozone: Domestic Programs | $4,709.1 | $4,606.0 | $3,790.0 | -$816.0 |
| Stratospheric Ozone: Multilateral Fund | $8,326.0 | $8,677.0 | $0.0 | -$8,677.0 |
| Subtotal, Clean Air | $264,811.7 | $271,254.0 | $142,901.0 | -$128,353.0 |
| Indoor Air and Radiation | | | | |
| Indoor Air: Radon Program | $2,985.9 | $3,115.0 | $0.0 | -$3,115.0 |
| Radiation: Protection | $7,780.1 | $8,519.0 | $2,000.0 | -$6,519.0 |
| Radiation: Response Preparedness | $2,543.1 | $2,573.0 | $2,221.0 | -$352.0 |
| Reduce Risks from Indoor Air | $13,389.1 | $13,242.0 | $0.0 | -$13,242.0 |
| Subtotal, Indoor Air and Radiation | $26,698.2 | $27,449.0 | $4,221.0 | -$23,228.0 |
| Brownfields | | | | |
| Brownfields | $25,411.8 | $25,419.0 | $16,082.0 | -$9,337.0 |
| Compliance | | | | |
| Compliance Monitoring | $98,283.6 | $100,975.0 | $86,374.0 | -$14,601.0 |
| Enforcement | | | | |
| Civil Enforcement | $172,309.6 | $170,849.0 | $140,677.0 | -$30,172.0 |
| Criminal Enforcement | $48,039.2 | $45,333.0 | $41,107.0 | -$4,226.0 |
| Environmental Justice | $6,401.5 | $6,691.0 | $2,000.0 | -$4,691.0 |
| NEPA Implementation | $16,098.2 | $16,130.0 | $13,496.0 | -$2,634.0 |
| Subtotal, Enforcement | $242,848.5 | $239,003.0 | $197,280.0 | -$41,723.0 |
| Geographic Programs | | | | |
| Geographic Program: Chesapeake Bay | $66,773.5 | $72,504.0 | $7,300.0 | -$65,204.0 |
| Geographic Program: Gulf of Mexico | $3,395.8 | $8,484.0 | $0.0 | -$8,484.0 |
| Geographic Program: Lake Champlain | $4,395.0 | $4,369.0 | $0.0 | -$4,369.0 |
| Geographic Program: Long Island Sound | $7,989.8 | $7,946.0 | $0.0 | -$7,946.0 |
| Geographic Program: Other | | | | |
| *Lake Pontchartrain* | $0.0 | $942.0 | $0.0 | -$942.0 |
| *S.New England Estuary (SNEE)* | $5,020.0 | $4,965.0 | $0.0 | -$4,965.0 |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| *Geographic Program: Other (other activities)* | $1,374.7 | $1,436.0 | $0.0 | -$1,436.0 |
| Subtotal, Geographic Program: Other | $6,394.7 | $7,343.0 | $0.0 | -$7,343.0 |
| Great Lakes Restoration | $353,207.0 | $297,963.0 | $30,000.0 | -$267,963.0 |
| Geographic Program: South Florida | $1,624.0 | $1,692.0 | $0.0 | -$1,692.0 |
| Geographic Program: San Francisco Bay | $4,493.7 | $4,786.0 | $0.0 | -$4,786.0 |
| Geographic Program: Puget Sound | $27,971.9 | $27,810.0 | $0.0 | -$27,810.0 |
| Subtotal, Geographic Programs | $476,245.4 | $432,897.0 | $37,300.0 | -$395,597.0 |
| Homeland Security | | | | |
| Homeland Security: Communication and Information | $3,480.0 | $3,834.0 | $3,511.0 | -$323.0 |
| Homeland Security: Critical Infrastructure Protection | $936.9 | $956.0 | $1,263.0 | $307.0 |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $4,918.0 | $5,336.0 | $4,986.0 | -$350.0 |
| Subtotal, Homeland Security | $9,334.9 | $10,126.0 | $9,760.0 | -$366.0 |
| Information Exchange / Outreach | | | | |
| State and Local Prevention and Preparedness | $14,413.1 | $15,269.0 | $10,031.0 | -$5,238.0 |
| TRI / Right to Know | $12,556.8 | $14,187.0 | $7,726.0 | -$6,461.0 |
| Tribal - Capacity Building | $14,760.7 | $14,448.0 | $12,631.0 | -$1,817.0 |
| Executive Management and Operations | $47,207.3 | $46,398.0 | $39,431.0 | -$6,967.0 |
| Environmental Education | $8,930.9 | $8,643.0 | $0.0 | -$8,643.0 |
| Exchange Network | $16,483.8 | $16,578.0 | $11,784.0 | -$4,794.0 |
| Small Minority Business Assistance | $1,704.6 | $1,573.0 | $0.0 | -$1,573.0 |
| Small Business Ombudsman | $2,102.2 | $2,080.0 | $1,965.0 | -$115.0 |
| Children and Other Sensitive Populations: Agency Coordination | $6,294.6 | $6,504.0 | $2,018.0 | -$4,486.0 |
| Subtotal, Information Exchange / Outreach | $124,454.0 | $125,680.0 | $85,586.0 | -$40,094.0 |
| International Programs | | | | |
| US Mexico Border | $2,864.8 | $3,012.0 | $0.0 | -$3,012.0 |
| International Sources of Pollution | $6,338.3 | $6,506.0 | $4,188.0 | -$2,318.0 |
| Trade and Governance | $5,857.8 | $5,777.0 | $0.0 | -$5,777.0 |
| Subtotal, International Programs | $15,060.9 | $15,295.0 | $4,188.0 | -$11,107.0 |
| IT / Data Management / Security | | | | |
| Information Security | $9,166.5 | $6,742.0 | $13,755.0 | $7,013.0 |
| IT / Data Management | $82,580.0 | $83,179.0 | $69,264.0 | -$13,915.0 |
| Subtotal, IT / Data Management / Security | $91,746.5 | $89,921.0 | $83,019.0 | -$6,902.0 |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Legal / Science / Regulatory / Economic Review | | | | |
| Integrated Environmental Strategies | $10,732.3 | $10,581.0 | $9,496.0 | -$1,085.0 |
| Administrative Law | $4,533.9 | $4,381.0 | $4,557.0 | $176.0 |
| Alternative Dispute Resolution | $1,142.0 | $1,015.0 | $0.0 | -$1,015.0 |
| Civil Rights Program | $10,101.9 | $9,699.0 | $8,545.0 | -$1,154.0 |
| Legal Advice: Environmental Program | $52,889.7 | $49,657.0 | $42,292.0 | -$7,365.0 |
| Legal Advice: Support Program | $14,489.7 | $15,170.0 | $16,451.0 | $1,281.0 |
| Regional Science and Technology | $1,398.2 | $1,406.0 | $0.0 | -$1,406.0 |
| Science Advisory Board | $3,820.3 | $3,736.0 | $3,779.0 | $43.0 |
| Regulatory/Economic-Management and Analysis | $15,498.4 | $15,011.0 | $15,532.0 | $521.0 |
| Subtotal, Legal / Science / Regulatory / Economic Review | $114,606.4 | $110,656.0 | $100,652.0 | -$10,004.0 |
| Operations and Administration | | | | |
| Central Planning, Budgeting, and Finance | $73,003.2 | $71,493.0 | $68,635.0 | -$2,858.0 |
| Facilities Infrastructure and Operations | $293,997.9 | $305,844.0 | $300,738.0 | -$5,106.0 |
| Acquisition Management | $31,042.0 | $30,803.0 | $25,438.0 | -$5,365.0 |
| Human Resources Management | $50,608.8 | $43,930.0 | $40,860.0 | -$3,070.0 |
| Financial Assistance Grants / IAG Management | $24,444.8 | $25,416.0 | $18,986.0 | -$6,430.0 |
| Workforce Reshaping | $0.0 | $0.0 | $25,549.0 | $25,549.0 |
| Subtotal, Operations and Administration | $473,096.7 | $477,486.0 | $480,206.0 | $2,720.0 |
| Pesticides Licensing | | | | |
| Science Policy and Biotechnology | $1,210.0 | $1,479.0 | $0.0 | -$1,479.0 |
| Pesticides: Protect Human Health from Pesticide Risk | $56,911.0 | $55,696.0 | $45,949.0 | -$9,747.0 |
| Pesticides: Protect the Environment from Pesticide Risk | $36,654.9 | $38,302.0 | $28,727.0 | -$9,575.0 |
| Pesticides: Realize the Value of Pesticide Availability | $5,554.3 | $6,191.0 | $5,084.0 | -$1,107.0 |
| Subtotal, Pesticides Licensing | $100,330.2 | $101,668.0 | $79,760.0 | -$21,908.0 |
| Resource Conservation and Recovery Act (RCRA) | | | | |
| RCRA: Corrective Action | $36,129.6 | $36,584.0 | $31,944.0 | -$4,640.0 |
| RCRA: Waste Management | $58,277.0 | $58,439.0 | $41,907.0 | -$16,532.0 |
| RCRA: Waste Minimization & Recycling | $9,254.1 | $9,141.0 | $0.0 | -$9,141.0 |
| Subtotal, Resource Conservation and Recovery Act (RCRA) | $103,660.7 | $104,164.0 | $73,851.0 | -$30,313.0 |
| Toxics Risk Review and Prevention | | | | |
| Endocrine Disruptors | $6,006.4 | $7,502.0 | $0.0 | -$7,502.0 |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Pollution Prevention Program | $11,338.1 | $12,194.0 | $0.0 | -$12,194.0 |
| Toxic Substances: Chemical Risk Review and Reduction | $64,329.5 | $58,995.0 | $58,626.0 | -$369.0 |
| Toxic Substances: Lead Risk Reduction Program | $12,780.9 | $13,203.0 | $0.0 | -$13,203.0 |
| Subtotal, Toxics Risk Review and Prevention | $94,454.9 | $91,894.0 | $58,626.0 | -$33,268.0 |
| Underground Storage Tanks (LUST / UST) | | | | |
| LUST / UST | $10,654.3 | $11,218.0 | $5,615.0 | -$5,603.0 |
| Water: Ecosystems | | | | |
| National Estuary Program / Coastal Waterways | $26,759.1 | $26,542.0 | $0.0 | -$26,542.0 |
| Wetlands | $20,448.7 | $20,922.0 | $17,913.0 | -$3,009.0 |
| Subtotal, Water: Ecosystems | $47,207.8 | $47,464.0 | $17,913.0 | -$29,551.0 |
| Water: Human Health Protection | | | | |
| Beach / Fish Programs | $1,364.0 | $1,638.0 | $0.0 | -$1,638.0 |
| Drinking Water Programs | $95,917.2 | $96,200.0 | $80,543.0 | -$15,657.0 |
| Subtotal, Water: Human Health Protection | $97,281.2 | $97,838.0 | $80,543.0 | -$17,295.0 |
| Water Quality Protection | | | | |
| Marine Pollution | $11,694.4 | $10,102.0 | $0.0 | -$10,102.0 |
| Surface Water Protection | $198,589.4 | $198,886.0 | $174,975.0 | -$23,911.0 |
| Water Infrastructure Finance and Innovation | $0.0 | $0.0 | $0.0 | $0.0 |
| Subtotal, Water Quality Protection | $210,283.8 | $208,988.0 | $174,975.0 | -$34,013.0 |
| Congressional Priorities | | | | |
| Water Quality Research and Support Grants | $12,688.0 | $12,614.0 | $0.0 | -$12,614.0 |
| Rescission of Prior Year Funds; Offsetting Receipt | | | | |
| Not Specified | $0.0 | $0.0 | $0.0 | $0.0 |
| **TOTAL EPM** | **$2,639,159.5** | **$2,602,009.0** | **$1,738,852.0** | **-$863,157.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Clean Air

**Clean Air Allowance Trading Programs**
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$15,236.6*** | ***$16,060.0*** | ***$12,574.0*** | ***-$3,486.0*** |
| Science & Technology | $6,045.0 | $7,518.0 | $5,739.0 | -$1,779.0 |
| Total Budget Authority | $21,281.6 | $23,578.0 | $18,313.0 | -$5,265.0 |
| Total Workyears | 68.4 | 71.4 | 63.7 | -7.7 |

**Program Project Description:**

Sulfur dioxide ($SO_2$) and nitrogen oxides ($NO_X$) are precursors for fine particulate matter ($PM_{2.5}$), while $NO_X$ also is a precursor for ground-level ozone ($O_3$). Researchers have associated $PM_{2.5}$ and $O_3$ exposure with adverse health effects in toxicological, clinical, and epidemiological studies. Lowering exposure to $PM_{2.5}$ and $O_3$ contributes to significant human health benefits.

The Clean Air Allowance Trading Programs are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries, such as those covered by the Cross-State Air Pollution Rule (CSAPR). In addition, under Title IV of the Clean Air Act, the Acid Rain Program (ARP), EPA operates a national annual $SO_2$ trading program and a NOx emissions reduction program for the power sector.[1]

The Clean Air Allowance Trading Programs establish a total emission limit that is allocated to affected emission sources in the form of allowances; authorizations to emit one ton of a pollutant. The owners and operators of affected emission sources may select among different methods of compliance – install pollution control equipment, purchase allowances, or switch fuel types. These programs are managed through a centralized database system operated by EPA.[2] Select data, collected under these programs, is made available to the public through EPA's Air Markets Program Data (AMPD) website. AMPD provides access to both current and historical data collected as part of the Clean Air Allowance Trading Programs through interactive maps, charts, reports, and pre-packaged datasets.

To implement the Clean Air Allowance Trading Programs, EPA operates the Part 75 emission measurement program that requires approximately 4,500 affected units to monitor and report emission and operation data.[3] The emission measurement program requires high degrees of accuracy and reliability from continuous emission monitoring systems (CEMS) or approved alternative methods at the affected sources. EPA provides the affected emission sources with a

[1] Clean Air Act § 401
[2] Clean Air Act § 403(d)
[3] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549. § 821

software tool, the Emissions Collection and Monitoring Plan System (ECMPS), to process and quality assure the data and facilitate reporting to EPA. The Agency conducts electronic audits, desk reviews, and field audits of the emission data and monitoring systems. The emission measurement program supports a number of other state and federal emission control and reporting programs.

EPA's centralized database system, the allowance tracking system, records allowance allocations and transfers.[4] At the end of each compliance period, allowances are reconciled against reported emissions to determine compliance for every facility with affected emission sources. For over 20 years, the affected facilities have maintained near-perfect compliance under the trading programs. In 2016, total $SO_2$ emissions from emission sources subject to the Acid Rain Program were 1.5 million tons, or approximately one-sixth of the statutory nationwide emissions cap. Total $NO_X$ emissions were 1.2 million tons in 2016, reflecting a reduction of over 6 million tons from projected 2000 $NO_X$ levels absent the Acid Rain Program, exceeding the program's total targeted reduction of 2 million tons.[5]

The Clean Air Act's Good Neighbor provision[6] requires states or, in some circumstances, the Agency to reduce interstate pollution that interferes with the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). Under this authority, EPA issued the Cross-State Air Pollution Rule, which requires 27 states in the eastern U.S. to limit their state-wide emissions of $SO_2$ and/or $NO_X$ in order to reduce or eliminate the states' contributions to $PM_{2.5}$ and/or ground-level $O_3$ pollution in other downwind states. The emission limitations are defined in terms of maximum state-wide "budgets" for emissions of annual $SO_2$, annual $NO_X$, and/or ozone-season $NO_X$ from certain large stationary sources in each state.

EPA relies on the Clean Air Status and Trends Network (CASTNET) for monitoring deposition, ambient sulfate and nitrate concentrations, and other air quality indicators. EPA uses the Long-Term Monitoring (LTM) program for assessing how water bodies and aquatic ecosystems are responding to reductions in sulfur and nitrogen emissions. Data from these air quality and environmental monitoring programs, in conjunction with $SO_2$ and $NO_X$ emissions data from the Part 75 monitoring program, have allowed EPA to develop a comprehensive accountability framework to track the results of its air quality programs. EPA applies this framework to the programs it implements and issues annual progress reports on compliance and environmental results achieved by the Acid Rain Program and Cross-State Air Pollution Rule. Previous reports have covered progress under the Clean Air Interstate Rule and the $NO_X$ Budget Trading Program. These annual progress reports not only track reductions in $SO_2$ and $NO_X$ emissions from affected sources, but assess the impacts of these reductions on air quality (e.g., ozone and $PM_{2.5}$ levels), acid deposition, surface water acidity, forest health, and other environmental indicators.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. EPA will continue to operate the Clean Air Allowance Trading

[4] Clean Air Act § 403(d).
[5] https://www3.epa.gov/airmarkets/progress/datatrends/index.html.
[6] Clean Air Act § 110(a)(2)(D); see also Clean Air Act § 110(c).

Programs and the systems to assess the programs' progress toward the environmental goals required by the Clean Air Act. EPA will work to meet requirements and requests for modeling in support of the power sector and for legal defense of regulatory actions. The program will support emission reporting for the Mercury and Air Toxics Standard (MATS) Rule,[7] aligned with capacity.

*Allowance tracking and compliance assessment*

EPA will allocate $SO_2$ and $NO_X$ allowances to affected emission sources and other account holders as established in the Clean Air Act[8] and state and federal CSAPR implementation plans. These allowance holdings will be maintained in an updated allowance tracking system (i.e., central database) that will record allowance transfers.[9] At the end of each compliance period, EPA will reconcile each facility's allowance holdings against its emissions to ensure compliance for all affected sources.[10]

*Emission measurement and data collection and review*

EPA will operate the Part 75 emission measurement program to collect, quality assure, and track emissions of air pollutants and air toxics, from approximately 4,500 fossil-fuel-fired electric generating units.

*Program assessment*

EPA will develop progress reports and other information to communicate the extent of the progress made by the Clean Air Allowance Trading Programs.[11]

*Assistance to states*

EPA will work with states to develop emission reduction programs to comply with Clean Air Act Good Neighbor Provision requirements.[12] This includes implementation of the CSAPR Update regulation finalized on September 7, 2016.

**Performance Measure Targets:**

| **(NOX) Ozone Season emissions of nitrogen oxides (NOx) from electric power generation sources (tons).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 590,000 | 580,000 |

For more information on program performance, see http://www.epa.gov/airmarket/progress/progress-reports.html.

[7] 40 C.F.R. pt. 63, subpt. UUUUU (National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units).
[8] Clean Air Act §§ 110 and 403
[9] Clean Air Act §§ 110 and 403
[10] Clean Air Act §§ 110 and 404-405 and state CSAPR implementation plans
[11] Government Performance and Results Act § 1115
[12] Clean Air Act § 110(a)(2)(D)

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$775.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$2,711.0/ -7.7 FTE) This program change streamlines the program's modeling and reporting activities and focuses the program on core statutory requirements.

**Statutory Authority:**

Clean Air Act.

**Atmospheric Protection Program**
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$89,143.7*** | ***$94,788.0*** | ***$13,542.0*** | ***-$81,246.0*** |
| Science & Technology | $7,050.8 | $7,964.0 | $0.0 | -$7,964.0 |
| Total Budget Authority | $96,194.5 | $102,752.0 | $13,542.0 | -$89,210.0 |
| Total Workyears | 217.3 | 224.1 | 120.0 | -104.1 |

**Program Project Description:**

EPA's Atmospheric Protection Program develops and delivers data, analysis, and technical information and assistance to identify technologies and strategies for industries, states, communities and tribes to meet Clean Air Act (CAA) obligations and other statutory requirements.

ENERGY STAR: EPA manages the ENERGY STAR program with clearly defined support from the U.S. Department of Energy. ENERGY STAR is the recognized symbol for energy efficiency; the program provides information that consumers and businesses rely on to make informed decisions to reduce energy use, save money, and reduce harmful air pollutants. By reducing energy use through voluntary action, ENERGY STAR lowers costs for states and local governments as they design and implement plans to meet their air quality and other environmental goals. Specifically, EPA manages and implements the following activities: the specification process for more than 75 product categories and the ENERGY STAR Most Efficient recognition program; the ENERGY STAR Certified Homes program for both single family homes and multifamily buildings; and the ENERGY STAR commercial and industrial programs. This work includes activities such as managing the ENERGY STAR brand, monitoring and verification, setting performance levels for building types, and managing and maintaining the ENERGY STAR Portfolio Manager to measure and track energy use in buildings.

Greenhouse Gas Reporting Program: EPA implements the U.S. Greenhouse Gas Reporting Program under statutory authority that directs EPA to "require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the U.S." EPA annually collects data from over 8,000 facilities from 41 large industrial source categories in the U.S. and uses this data to improve estimates included in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, to support federal and state-level policy development, and to share with industry stakeholders, state and local governments, the research community, and the public.

Inventory of U.S. Greenhouse Gas Emissions and Sinks: In order to fulfill U.S. Treaty obligations, under Article 4 of the 1992 Framework Convention on Climate Change, which was ratified by the Senate, EPA prepares the annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, to provide

information on total annual U.S. emissions and removals by source, economic sector, and greenhouse gas. EPA leads the interagency process of preparing the *Inventory*, working with technical experts from numerous federal agencies, including the Department of Energy's Energy Information Agency; U.S. Department of Agriculture; Department of Defense; U.S. Geological Survey, and academic and research institutions.

Managing the Transition from Ozone Depleting Substances: EPA implements efforts directed by Section 612 of the Clean Air Act to ensure a smooth transition from ozone depleting substances (ODS) to safer alternatives.

Science, Economic, and Technical Analyses: EPA conducts a range of economic, scientific and technical analyses for CAA regulatory actions and technical input.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will provide technical, analytical and scientific support for regulatory action consistent with Presidential Executive Order on Promoting Energy Independence and Economic Growth dated March 28, 2017.

In FY 2019, EPA will establish user fees for entities that participate in the ENERGY STAR program. Fee collection would start in FY 2019 after EPA undertakes a rulemaking and finalizes a fees rule. By requesting an advance appropriation of $46 million for FY 2019, the budget provides the program the authority to use fees to operate the program in advance of collections. The fees would provide for necessary expenses, including the development, operation, and maintenance of the ENERGY STAR program. The legislative proposal to authorize collection and spending of the fees is included as an administrative provision in the President's Budget Appendix.

The Agency will continue to implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum on *Streamlining Permitting and Reducing Burden to Domestic Regulatory Manufacturing*. These efforts are expected to dovetail with previously identified Executive Orders, including implementation of Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs and Executive Order 13777, Enforcing the Regulatory Reform Agenda. EPA will evaluate recommendations, and where appropriate, take action to repeal, replace, or modify existing regulations to make them less burdensome.

In FY 2019, EPA will continue to implement the Greenhouse Gas Reporting Program covering a total of 41 sectors, with approximately 8,000 reporters. Focus areas for the program will include:

- Implementing regulatory revisions across multiple sectors to address stakeholder concerns associated with collection and potential release of data elements considered to be sensitive business information;
- Aligning the database management systems with those regulatory amendments; and
- Conducting a QA/QC and verification process through a combination of electronic checks, staff reviews, and follow-up with facilities when necessary.

EPA will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks.

**Performance Measure Targets:**

| (G18) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 65 | 65 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$2,896.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$78,350.0/ -140.3 FTE) This program change reflects a reduction in the GHG Reporting program and eliminates appropriated funding for the partnership programs with industry, businesses, states, tribes, and localities which will transition to fee funding.

- (+70.0 FTE) This program change reflects an increase in reimbursable FTE for the development, operation, and maintenance of a fee-supported ENERGY STAR program. By requesting an advance appropriation of $46 million for FY 2019, the budget allows for the time involved in both a fee rulemaking and developing and enacting new authorizing legislation by providing the program the authority to use fees to operate the program in advance of collections.

**Statutory Authority:**

Clean Air Act; FY 2008 Consolidated Appropriations Act; Global Change Research Act of 1990; Global Climate Protections Act; Energy Policy Act of 2005, § 756; Pollution Prevention Act, §§6602-6605; National Environmental Policy Act (NEPA), § 102; Clean Water Act, § 104; **S**olid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), § 8001.

**Federal Stationary Source Regulations**

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$20,282.9*** | ***$21,736.0*** | ***$16,898.0*** | ***-$4,838.0*** |
| Total Budget Authority | $20,282.9 | $21,736.0 | $16,898.0 | -$4,838.0 |
| Total Workyears | 102.2 | 122.5 | 79.1 | -43.4 |

**Program Project Description:**

Under the Clean Air Act (CAA), EPA is required to set National Ambient Air Quality Standards (NAAQS) for ambient pollutants considered harmful to public health and the environment. The six "criteria" pollutants for which EPA has established NAAQS are: particulate matter (PM), ozone, sulfur dioxide ($SO_2$), nitrogen dioxide ($NO_2$), carbon monoxide (CO), and lead. The CAA requires EPA to periodically review the science upon which the NAAQS are based and the standards themselves. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

Section 109 of the CAA Amendments of 1990 established two types of NAAQS. Primary standards are set at a level requisite to protect public health with an adequate margin of safety. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects.

This program also includes activities directed toward reducing air emissions of toxic, criteria, and other pollutants from stationary sources mandated under Sections 111 and 112 of the CAA. Specifically, to address air toxics, this program provides for the development of National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources (i.e., Maximum Achievable Control Technology - MACT standards) and area sources; the development of standards of performance and emissions guidelines for waste combustion sources; the assessment and, as necessary, regulation of residual risk remaining after implementation of the NESHAP; the periodic review and revision of the NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition to existing CAA and court-ordered mandates, EPA is required to periodically review, and where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. The program also includes issuing, reviewing, and periodically revising, as necessary, New Source Performance Standards (NSPS) for criteria and certain listed pollutants, and providing guidance on Reasonably Available Control Technology (RACT) through issuance and periodic review and revision of control technique guidelines (CTG).

Sections 169A and 169B of the CAA also require protection of air quality related values (AQRV) for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Visibility is one such AQRV, and Congress established a national goal of returning visibility in the Class I areas to natural conditions, i.e., the visibility conditions which existed without manmade air pollution. The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the Agency will continue to implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum, *Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing*. These efforts are expected to dovetail with previously identified Executive Orders, including implementation of Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs and Executive Order 13777, Enforcing the Regulatory Reform Agenda. EPA will evaluate recommendations, and where appropriate, take action to repeal, replace, or modify existing regulations to make them less burdensome.

NAAQS: In FY 2019, EPA will continue its reviews of the NAAQS and make revisions, as appropriate. In FY 2019, EPA will finalize its review of the $SO_2$ primary NAAQS, which is currently required pursuant to consent decree. Each review involves a comprehensive reexamination, synthesis, and evaluation of the scientific information, the design and conduct of complex air quality and risk and exposure analyses, the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

EPA will continue work to achieve and maintain compliance with existing standards. These include the ozone standards established in 2015, 2008, 1997, and 1979; the 1997 $PM_{10}$ standards; the 2012, 2006 and 1997 $PM_{2.5}$ standards; the 2008 lead standard[13]; the 2010 $NO_2$ standard; the 1971 CO standard; and the 2010 $SO_2$ standard.

Section 111 of the CAA requires EPA to set NSPS for industrial categories that cause, or significantly contribute to, air pollution that may endanger public health or welfare. In FY 2019, EPA will continue work to address NSPS for sources of air pollutants, consistent with the requirements of the CAA. Section 111 of the CAA also requires EPA, at least every eight years, to review and, if appropriate, revise NSPS for each source category for which such standards have been established.

Air Toxics**:** Section 112(d)(6) of the CAA requires EPA to review and revise, as necessary, within eight years, all of the MACT standards for air toxics that have been promulgated under CAA Section 112 since 1990. These reviews include collection of new information and emissions data from industry; review of emission control technologies; and associated economic analyses for the affected industries. Similarly, Section 112(f) of the CAA requires EPA to conduct reviews of the risk that remains after the implementation of MACT standards within eight years of promulgation.

[13] In September 2016, EPA completed the review of the 2008 Lead NAAQS and retained the standards without revision.

In FY 2019, EPA will engage in rulemaking efforts to review and revise, as necessary and appropriate, emissions standards for seven source categories, including Leather Finishing Operations; Surface Coating of Wood Building Products; Printing, Coating, and Dyeing of Fabric and Other Textiles; Surface Coating of Metal Furniture; Surface Coating of Large Appliances; Friction Products Manufacturing; and Wet Formed Fiberglass Mat Production. This is pursuant to a court order with a deadline of December 31, 2018 for the final rules. EPA also is under court orders to complete risk and technology review rulemakings under Section 112 of CAA by 2020 for 26 additional source categories. A substantial portion of the work for these rulemakings under Section 112 of the CAA will need to occur in FY 2019. In addition, under Section 129 of the CAA, EPA plans to continue efforts to address the risk and technology review for Large Municipal Waste Combustors. Compliance testing and monitoring methodologies will continue to be developed and improved in support of these risk determination and rulemaking efforts.

EPA will continue to develop the next National Air Toxics Assessment (NATA). The purpose of NATA is to identify and prioritize air toxics, emission source types, and locations that are of greatest potential concern in terms of contributing to population risk. The results are used in many ways, including: to assist states in designing their own local-scale assessments; to set priorities and help states improve emissions inventories; and to help direct priorities for expanding and improving the air toxics monitoring network.

In FY 2019, EPA will continue to address program-wide issues, including court-vacated rules that apply across many industrial sources.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,904.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$6,742.0/ -43.4 FTE) This program change is a reduction in the Federal Stationary Source Regulations program. As a result of this change, the Agency will work to develop a more efficient approach to meeting its statutorily-required NAAQS reviews. In addition, EPA will rely on states and other stakeholders to identify burden and cost-reduction actions needed to improve the federal-state partnership and the stationary source regulatory process as a whole.

**Statutory Authority:**

Clean Air Act.

**Federal Support for Air Quality Management**

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$127,113.4*** | ***$125,387.0*** | ***$96,097.0*** | ***-$29,290.0*** |
| Science & Technology | $7,283.8 | $7,280.0 | $4,031.0 | -$3,249.0 |
| Total Budget Authority | $134,397.2 | $132,667.0 | $100,128.0 | -$32,539.0 |
| Total Workyears | 812.6 | 842.0 | 601.8 | -240.2 |

## Program Project Description:

The Federal Support for Air Quality Management Program assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs for the National Ambient Air Quality Standards (NAAQS), establishes standards for reducing air toxics, and sustains visibility protection. EPA develops federal measures and regional strategies that help to reduce emissions from stationary and mobile sources; whereas states have the primary responsibility (and tribes may choose to take responsibility) for developing clean air measures necessary to meet the NAAQS and protect visibility. At the core of this program is the use of scientific and technical air emissions data. EPA, working with states, tribes, and local air agencies, develops methods for estimating and measuring emissions and concentrations, collects these data, and maintains databases (e.g., Emissions Inventory System, Air Quality System, etc.). EPA also supports training for state, tribal, and local air pollution professionals.

Under the Clean Air Act (CAA), EPA is required to set the NAAQS for ambient pollutants considered harmful to public health and the environment. The six "criteria" pollutants for which EPA has established NAAQS are: particulate matter (PM), ozone, sulfur dioxide ($SO_2$), nitrogen dioxide ($NO_2$), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to periodically review the science upon which the NAAQS are based and the standards themselves. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

Section 109 of the CAA Amendments of 1990 established two types of NAAQS - primary and secondary standards. Primary standards are set at a level requisite to protect public health with an adequate margin of safety, including the health of at-risk populations. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

For each of the six criteria pollutants, under Section 110 of the CAA, EPA tracks two kinds of air pollution information: air pollutant concentrations based on actual measurements in the ambient (outside) air at monitoring sites throughout the country; and pollutant emissions based on

engineering estimates or measurements of the total tons of pollutants released into the air each year. EPA works with state and local governments to ensure the technical integrity of emission source controls in State Implementation Plans (SIPs) and with tribes on Tribal Implementation Plans (TIPs).

The new source review (NSR) preconstruction permit program in Title I of the CAA is a part of state plans to attain and maintain the NAAQS. The two primary aspects of this program are the prevention of significant deterioration (PSD) program, described in Section 165 of the CAA and the nonattainment NSR program, which is described in various parts of the CAA, to include Sections 173 and 182; among others.

Sections 169A and 169B of the CAA also require protection of visibility for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Congress established a national goal of returning visibility in the Class I areas to natural conditions (i.e., the visibility conditions which existed without manmade air pollution). The Regional Haze Rule, which sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

The provisions in the Clean Air Act that address the control of air toxics are found in Section 112 of the CAA. This section requires that the emissions control bases for all Maximum Achievable Control Technology (MACT) standards be reviewed and updated, as necessary, every eight years.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. Air quality has improved significantly for communities across the country since passage of the CAA in 1970 (with amendments in 1977 and 1990). Since 1990, for example, national average levels have decreased by 22 percent for ozone, 39 percent for particulate matter, 85 percent for sulfur dioxide, and 99 percent for lead.[14] In FY 2019, EPA will continue to prioritize key activities in support of attainment of the NAAQS and implementation of stationary source regulations support by state, tribal, and local air quality programs.

In FY 2019, EPA will continue its review of the NAAQS in accordance with the CAA. During FY 2019, EPA will finalize its review of the 2010 $SO_2$ primary NAAQS, which is currently required pursuant to a consent decree. In addition, EPA will continue its CAA mandated responsibilities to administer the NAAQS by reviewing state plans and decisions consistent with statutory obligations; taking federal oversight actions such as acting on State Implementation Plan/Tribal Implementation Plan (SIP/TIP) submittals; and by developing regulations and policies to ensure continued health and welfare protection during the transition between existing and new standards. EPA will work with states to adjust the schedules, as appropriate, for additional state-requested rulemakings and guidance documents to support state and tribal efforts to implement CAA SIP requirements to align with capacity and priorities. EPA will provide prioritized technical and policy assistance to states and tribes developing or revising SIPs/TIPs.

[14] *Our Nation's Air: Status and Trends Through 2016* https://gispub.epa.gov/air/trendsreport/2017/#highlights.

EPA, in close collaboration with states and tribes, will work to reduce the number of areas not in attainment with the NAAQS. The agency will continue to look for ways to improve the efficiency and effectiveness of the SIP process, including its own review process, with a goal of maximizing timely processing of state-requested SIP actions. The Agency will take action on designation or re-designation of nonattainment areas to attainment, as appropriate, pursuant to Sections 107 and 110 of the CAA, respectively. A focus will be placed on states achieving attainment, looking at improved processes, and implementation options. Also, a new SIP-focused IT system currently under development called SPeCS (the State Plan Electronic Collection System), is expected to improve EPA tracking of SIP submittals and EPA action on SIPs in FY 2018 and beyond.

EPA will continue reviews to approve SIPs for regional haze to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. In FY 2019, EPA will continue to assist states that are developing plan revisions. Section 169A of the CAA requires EPA to assess and approve the plans.

EPA will continue to assist other federal agencies and state and local governments in implementing the conformity regulations promulgated pursuant to Section 176 of the CAA. These regulations require federal agencies, taking actions in nonattainment and maintenance areas, to determine that the emissions caused by their actions will conform to the SIP.

One of EPA's priorities is to fulfill its CAA and court-ordered obligations. Section 112 of the CAA requires that the emissions control bases for all MACT standards are reviewed and updated, as necessary, every eight years. In FY 2019, EPA will continue to conduct risk assessments to determine whether the MACT rules appropriately protect public health. EPA also will review developments in practices, processes and technologies pursuant to Section 112(d)(6). The program will prioritize its work with an emphasis on meeting court-ordered deadlines.

EPA will work to meet its Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) obligations pursuant to Sections 165 and 173 of the CAA. EPA will continue to review and respond to reconsideration requests and, take actions necessary to respond to court decisions, and work with states and industries on NSR applicability issues. In aligning this effort with Executive Order 13777, Enforcing the Regulatory Reform Agenda and Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs, EPA will evaluate existing regulations and pursue opportunities to make them less burdensome.

EPA maintains the RACT/BACT/LAER clearinghouse (RBLC) to help permit applicants and reviewers make pollution prevention and control technology decisions for stationary air pollution sources. The RBLC includes data submitted by several U.S. territories and all 50 states on over 200 different air pollutants and 1000 industrial processes[15]. EPA expects to consider opportunities to improve the RBLC to support efficiency in permitting for air agencies and sources.

In FY 2019, EPA will continue to provide technical assistance to state, local, and tribal air agencies for both NSR and title V (operating) permits. This support will occur at appropriate times and as requested, consistent with applicable requirements, before and during the permitting process. EPA expects to implement such support in an efficient manner and consistent with established

[15] Please see http://cfpub.epa.gov/RBLC/ for more information.

timeframes for applicable oversight of state, tribal, and local air agencies during the permitting process.

The Agency will continue to implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum, Streamlining Permitting and Reducing Regulatory Burden for Domestic Manufacturing. These efforts are expected to dovetail with previously identified Executive Orders, including implementation of Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs and Executive Order 13777, Enforcing the Regulatory Reform Agenda. EPA will evaluate recommendations, and where appropriate, take action to repeal, replace, or modify existing regulations to make them less burdensome.

In FY 2019, EPA will provide assistance to state, tribal, and local agencies for various technical activities. EPA uses a broad suite of analytical tools, such as source characterization analyses, emission factors and inventories, statistical analyses, source apportionment techniques, quality assurance protocols and audits, improved source testing and monitoring techniques, source-specific dispersion and regional-scale photochemical air quality models, and augmented cost/benefit tools, to assess control strategies[16]. The Agency will maintain the core function of these tools (e.g., integrated multiple pollutant emissions inventory, air quality modeling platforms, etc.) to provide the technical underpinnings for more efficient and comprehensive air quality management by state, local and tribal agencies.

In FY 2019, EPA will maintain baseline analytical capabilities required to develop effective regulations including: analyzing the economic impacts of regulations and policies; developing and refining existing emission test methods for measuring pollutants from smokestacks and other industrial sources; developing and refining existing source sampling measurement techniques to determine rates of emissions from stationary sources; updating existing dispersion models for use in source permitting; and conducting air quality modeling that characterizes the atmospheric processes that disperse a pollutant emitted by a source. Resources from the Science and Technology appropriation component of this program support the scientific development of these capabilities.

In FY 2019, state and local agencies will have the lead in implementing the National Air Toxics Trends Sites (NATTS). The NATTS, designed to capture the impacts of widespread pollutants, is comprised of 27 permanent monitoring sites[17]. EPA will consult on priority data gaps to better assess population exposure to toxic air pollution.

In FY 2019, EPA will maintain the Air Quality System (AQS), one of the Agency's mission essential functions, which houses the nation's air quality data. EPA will provide the core support needed for the AQS Data Mart, which provides access to the scientific community and others to obtain air quality data via the internet. The Agency's national real-time ambient air quality data system (AirNow) will maintain baseline operations. EPA will continue to operate and maintain the Emissions Inventory System (EIS), a system used to quality assure and store current and historical emissions inventory data, and to generate the National Emissions Inventory (NEI). The NEI is used by EPA, states, and others to analyze the public health risks from air toxics and to develop strategies to manage those risks and support multi-pollutant analysis covering air emissions. EPA

[16] Please see https://www.epa.gov/technical-air-pollution-resources for more information.
[17] See http://www.epa.gov/ttn/amtic/airtoxpg.html for additional information.

will continue to implement previously identified Lean strategies to streamline NEI development and to reduce burden for industry for meeting their emissions data requirements through the Combined Air Emissions Reporting (CAER) effort.

**Performance Measure Targets:**

| (NA2) Percent of U.S. Population Living in Nonattainment Areas. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 36 | 34 |

| (DV) Percent of measured air quality improvement in counties not meeting the NAAQS from the 2016 baseline. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | -2 | -3 |

| (SIP) Number of SIPs acted on by the regional offices. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 150 | 175 |

| (NA1) Number of Nonattainment Areas. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 155 | 138 |

| (M92) Cumulative percentage reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 67 | 70 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$4,897.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$34,187.0/ -237.1 FTE) This program change is a reduction in technical assistance to and support of state, tribal and local air programs, including those that develop and implement clean air plans, issue air permits, and provide air quality information to the public. The Agency will prioritize supporting state and local air agencies in obtaining air quality improvements necessary to bring areas into attainment.

**Statutory Authority:**

Clean Air Act.

**Stratospheric Ozone: Domestic Programs**

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$4,709.1*** | ***$4,606.0*** | ***$3,790.0*** | ***-$816.0*** |
| Total Budget Authority | $4,709.1 | $4,606.0 | $3,790.0 | -$816.0 |
| Total Workyears | 20.2 | 22.0 | 18.0 | -4.0 |

**Program Project Description:**

The stratospheric ozone layer protects life by shielding the Earth's surface from harmful ultraviolet (UV) radiation. Scientific evidence demonstrates that ozone-depleting substances (ODS) used around the world destroy the stratospheric ozone layer,[18] which raises the incidence of skin cancer and other illnesses through overexposure to increased levels of UV radiation.[19]

EPA estimates that in the United States alone, the worldwide phase out of ODS will avert millions of cases of non-fatal and fatal skin cancers (melanoma and non-melanoma), as well as millions of cataract cases, which is the leading cause of blindness. Full implementation of the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) globally, including its amendments and adjustments, is expected to avoid more than 280 million cases of skin cancer, approximately 1.6 million skin cancer deaths, and more than 45 million cases of cataracts in the United States among individuals born between 1890 and 2100.[20]

EPA implements provisions of the Clean Air Act Amendments of 1990 (CAA) and the Montreal Protocol, resulting in the reduction of ODS in the U.S. and lower health risks to the American public. EPA uses a combination of regulatory and partnership programs to protect and restore the ozone layer. The CAA provides for a phase-out of production and consumption of ODS and requires controls on their use, including banning certain emissive uses, requiring labeling to inform consumer choice, and requiring sound servicing practices for the use of refrigerants in air conditioning and refrigeration appliances. The CAA also prohibits venting ODS and their substitutes and requires listing of alternatives that reduce overall risk to human health or the environment, ensuring that businesses and consumers have alternatives that are safer for the ozone layer than the chemicals they replace.

[18] World Meteorological Organization (WMO). Scientific Assessment of Ozone Depletion: 2014. Global Ozone Research and Monitoring Project–Report No. 56, Geneva, Switzerland. 2014.
[19] Fahey, D.W., and M.I. Hegglin (Coordinating Lead Authors), Twenty questions and answers about the ozone layer: 2014 Update, In Scientific Assessment of Ozone Depletion: 2014, Global Ozone Research and Monitoring Project–Report No. 56, World Meteorological Organization, Geneva, Switzerland, 2014. Available on the internet at: https://www.esrl.noaa.gov/csd/assessments/ozone/2014/twentyquestions2014update.pdf.
[20] EPA, Updating ozone calculations and emissions profiles for use in the Atmospheric Health Effects Framework Model (2015). Available on the internet at: https://www.epa.gov/sites/production/files/2015-11/documents/ahef_2015_update_report-final_508.pdf.

As a signatory to the Montreal Protocol, the U.S. is committed to ensuring that our domestic program is at least as stringent as international obligations and to regulating and enforcing the terms of the Montreal Protocol respective of domestic authority. With U.S. leadership, the Parties to the Montreal Protocol agreed to a more aggressive phase-out for ozone-depleting hydrochlorofluorocarbons (HCFCs) equaling a 47 percent reduction in overall emissions during the period 2010-2040. An adjustment in 2007 also calls on Parties to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate.[21] In 2016, the parties to the Montreal Protocol agreed to the Kigali Amendment,[22] which will globally phase down production and consumption of hydrofluorocarbons (HFCs). HFCs are internationally manufactured fluorinated greenhouse gases used in all the same sectors as ODS such as air conditioning, refrigeration, fire suppression, solvents, foam blowing agents, and aerosols.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In carrying out the requirements of the CAA and the Montreal Protocol in FY 2019, EPA will continue to meet its ODS import caps and work toward the gradual reduction in production and consumption of ODS. This will likely require finalization of a notice-and-comment rulemaking in FY 2019. To meet FY 2019 targets and out year targets, EPA will issue allocations for HCFC production and import in accordance with the requirements established under CAA Sections 605 and 606; manage information that industry identifies as Confidential Business Information (CBI) under CAA Section 603; and implement current regulations concerning the production, import, and export of ODS and maintenance of the tracking system used to collect the information. EPA also will prepare and submit an annual report under Article 7 of the Montreal Protocol on U.S. consumption and production of ODS.

CAA Section 612 requires continuous review of alternatives for ODS through EPA's Significant New Alternatives Policy (SNAP) program[23] to find those that pose less overall risk to human health and the environment and to promote a smooth transition to safer alternatives. Through these evaluations, SNAP generates lists of acceptable and unacceptable substitutes for approximately 50 end uses across eight industrial sectors. EPA will act upon a number of submissions and petitions in FY 2019 that expand the list of acceptable alternatives, particularly for end-uses where there is an urgent need for more options. The schedule for other approvals will be adjusted at least until FY 2019. Certain approvals adjusted for FY 2018 will be taken up with other pending approvals in FY 2019, to the extent practicable, as EPA seeks to minimize the risk to the investment made by companies in R&D and testing phases given that SNAP listings are critical to the commercialization of many substitutes and alternative technologies in key sectors of use. Final Agency action can include notices of acceptability listings as well as notice-and-comment rulemaking. EPA also will continue to work towards ensuring the uptake of safer alternatives and technologies, while supporting innovation, and ensuring adoption through support for changes to industry codes and standards.

[21] *Montreal Protocol Decision XIX/6: Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances (hydrochlorofluorocarbons).*

[22] Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Kigali 15 October 2016, https://treaties.un.org/doc/Publication/CN/2016/CN.872.2016-Eng.pdf.

[23] For more information, see: http://www.epa.gov/ozone/snap/index.html.

In FY 2019, EPA will continue efforts under CAA Section 608 to reduce emissions of refrigerants during the service, maintenance, repair and disposal of air conditioning and refrigeration equipment. EPA will issue a final rule revisiting aspects of the extension of the Section 608 requirements to substitutes, including HFCs; and also will provide a minimal level of compliance assistance for rules concerning servicing, maintenance, repair and disposal of air conditioning and refrigeration appliances.

EPA will continue to support the CAA Section 609 motor vehicle air conditioning (MVAC) servicing program to reduce emissions of refrigerants from MVAC systems. Where industry consensus standards are available that EPA considers to be sufficient for protection of human health and the environment, EPA may adopt the standards into its regulations through incorporation by reference. EPA is aware of such standards developed by the Society of Automotive Engineers (SAE) for recovery equipment for new alternatives and will engage with the SAE and others on potential options.

In FY 2019, EPA will continue to support implementation of the Montreal Protocol domestically by ensuring U.S. interests are represented at Montreal Protocol meetings by providing technical expertise. The Agency will provide technical expertise for the Montreal Protocol's Technology and Economic Assessment Panel and its Technical Options Committees.

With the decline in allowable HCFC production, a significant stock of air conditioning and refrigeration equipment that continues to use HCFCs will need access to recovered and recycled/reclaimed HCFCs to ensure proper servicing. EPA reviews available market data to ensure that future demand for virgin HCFCs can be satisfied under production and import caps. EPA also will implement other provisions of the Montreal Protocol, including exemption programs to allow for a continued smooth phase out of ODS.

Additionally, EPA will continue to work with federal and international agencies to stem illegal imports of ODS in order to support a level playing field for companies that produce and import ODS. EPA will continue data exchange with U.S. Customs and Border Protection and Homeland Security Investigations on ODS importers and exporters for Customs to determine admissibility and target illegal ODS shipments entering the United States as well as reviewing and approving ODS imports flagged in the Automated Customs Environment.

**Performance Measure Targets:**

| **(S01) Remaining US Consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, measured in tons of Ozone Depleting Potential (ODP).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 1,520 | 1,520 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$364.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$1,180.0/ -4.0 FTE) This program change is a reduction to the program resources related to the following activities: development of outreach and compliance assistance materials; adoption of SAE standards for recycling equipment for alternative refrigerants; support to Customs and Border Protection at ports; and assistance to refrigeration and air-conditioning technicians.

**Statutory Authority:**

Title VI of the Clean Air Act.

## Stratospheric Ozone: Multilateral Fund

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$8,326.0*** | ***$8,677.0*** | ***$0.0*** | ***-$8,677.0*** |
| Total Budget Authority | $8,326.0 | $8,677.0 | $0.0 | -$8,677.0 |

**Program Project Description:**

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) facilitates a global phaseout of ozone-depleting substances (ODS). The United States implements its treaty obligations primarily through Title VI of the Clean Air Act.

The *Multilateral Fund for the Implementation of the Montreal Protocol* (Multilateral Fund) was created by the Parties to the Montreal Protocol to provide funds to enable developing countries to comply with their Montreal Protocol obligations to phase out the use of ODS on an agreed schedule. The United States and other developed countries contribute to the Multilateral Fund. The U.S. contribution to the Multilateral Fund is split between EPA and the Department of State.

**FY 2019 Activities and Performance Plan:**

Resources for this program are proposed for elimination in FY 2019. EPA will continue domestic ODS reduction work.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$8,677.0) This program change eliminates funding for the Stratospheric Ozone: Multilateral Fund program.

**Statutory Authority:**

Title VI of the Clean Air Act.

# Brownfields

**Brownfields**
Program Area: Brownfields
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$25,411.8*** | ***$25,419.0*** | ***$16,082.0*** | ***-$9,337.0*** |
| Total Budget Authority | $25,411.8 | $25,419.0 | $16,082.0 | -$9,337.0 |
| Total Workyears | 141.2 | 149.8 | 92.6 | -57.2 |

**Program Project Description:**

Brownfields sites are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields can be found in the heart of America's main streets and former economic centers. The Brownfields program supports these efforts by awarding grants and providing technical assistance to states, tribes, local communities, and other stakeholders to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a Brownfields site that receives EPA funding.[24] As of the end of FY 2017, grants awarded by the program have led to over 69,200 acres of idle land made ready for productive use and over 129,240 jobs and $24.7 billion leveraged.[25]

This funding supports the operating expenses for the program. Operating activities include 1) conducting the annual, high volume cooperative agreement competitions; 2) awarding new cooperative agreements; 3) managing the ongoing cooperative agreement workload; 4) providing technical assistance and ongoing support to grantees; 5) collaborating with other agency programs; 6) operating the Assessment Cleanup and Redevelopment Exchanges System (ACRES) online grantee reporting tool; 7) assisting communities to explore land reuse opportunities under the Land Revitalization program; 8) developing guidance and tools that clarify potential environmental cleanup liabilities; and 9) potentially organizing National Brownfields Training Conference.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the Brownfields program will support the following activities:

[24] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY16; and (2) census data from the 2011-2015 American Community Survey.
[25] EPA's ACRES database.

- **Compete and Award New Cooperative Agreements**: Review, select, and award an estimated 355 new cooperative agreements which will lead to over 1,000 projects and approximately $1.1 billion and 5,800 jobs leveraged.

- **Oversight and Management of Existing Cooperative Agreements:** Continue federal fiduciary responsibility to manage approximately 900 existing brownfields cooperative agreements in a reduced capacity while ensuring the terms and conditions of the agreements are met, and provide limited technical assistance. Provide targeted environmental oversight support to grantees (*e.g.*, site eligibility determinations, review of environmental site assessment and cleanup reports).

- **Technical Assistance:** Provide technical assistance to states, tribes, and local communities in the form of research, training, and analysis. This can lead to cost effective implementation of brownfields redevelopment projects by providing communities with the knowledge necessary to understand market conditions, economic development and other community revitalization strategies, and how cleanup and reuse can be catalyzed by small businesses.

- **Collaboration:** The program will work collaboratively with our partners at the state, tribal, and local level on innovative approaches to help achieve land reuse. It also will continue to develop guidance and tools that clarify potential environmental cleanup liabilities, thereby providing greater certainty for parties seeking to reuse these properties. The program also can provide direct support to facilitate transactions for parties seeking to reuse contaminated properties.

- **Accomplishment Tracking**: Support the maintenance of the ACRES online grantee reporting tool. This enables grantees to track accomplishments and report on the number of sites assessed and cleaned up, and the amount of dollars and jobs leveraged with brownfields grants.

- **Land Revitalization Program Support:** Provide support for approximately two communities as part of EPA's Land Revitalization program. The Land Revitalization program supports communities in their efforts to restore contaminated lands into sustainable community assets.

- **National Brownfields Training Conference**: EPA will explore options for hosting a National Brownfields Training Conference in FY 2019 or FY 2020. This is the largest and most comprehensive training conference in the nation focused on environmental revitalization and economic redevelopment issues.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$200.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefits costs.

- (-$9,537.0/ -57.2 FTE) This program change reduces funding for managing and closing out assistance agreements, data collection analysis, and system enhancements.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by the Small Business Liability Relief and Brownfields Revitalization Act, §§ 101, 104, 107, 128; Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, § 8001.

# Compliance

**Compliance Monitoring**
Program Area: Compliance
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$98,283.6*** | ***$100,975.0*** | ***$86,374.0*** | ***-$14,601.0*** |
| Inland Oil Spill Programs | $145.2 | $138.0 | $0.0 | -$138.0 |
| Hazardous Substance Superfund | $1,028.8 | $988.0 | $988.0 | $0.0 |
| Total Budget Authority | $99,457.6 | $102,101.0 | $87,362.0 | -$14,739.0 |
| Total Workyears | 506.4 | 538.9 | 428.7 | -110.2 |

**Program Project Description:**

The Compliance Monitoring program is a key component of EPA's compliance assurance program that allows the controlling regulatory authority to detect noncompliance and promote compliance with the nation's environmental laws. Effective targeting of compliance monitoring plays a critical role in achieving the goals EPA has set forth for protecting health and the environment. The states and EPA use compliance monitoring tools and activities to identify whether regulated entities are in compliance with environmental laws enacted by Congress, as well as applicable regulations and permit conditions. In addition, compliance monitoring activities, such as inspections and investigations, are conducted to determine whether conditions exist that may present imminent and substantial endangerment to human health and the environment.

The Compliance Monitoring program promotes joint governance and the expanded use of compliance assurance tools (such as compliance assistance) among state, tribal, local, and federal partners. States, tribes, and EPA have policies/procedures on the appropriate use of the tools in our compliance assurance tool box, with states taking the majority of actions in authorized programs. Tools in the compliance monitoring program include:

- Compliance Assistance. EPA collaborates with state, local, federal, tribal, and industry partners with the E-Enterprise Portal, a website which allows the states, the regulated community, and EPA to transact business such as permitting and reporting, and provides easy access to needed compliance assistance information. Also, EPA partners with third party organizations and federal agencies to support our 17 existing web-based, sector-specific Compliance Assistance Centers.

- Full Electronic Reporting with Compliance Assistance. EPA has an internet-accessible, national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), which supports both the compliance monitoring and civil enforcement programs. Currently, EPA and states are implementing the National Pollution Discharge

Elimination System (NPDES) Electronic Reporting Rule through ICIS.[26] Phase 1 of the rule was implemented in FY 2017 for NPDES Discharge Monitoring Reports (DMRs), including compliance assistance features such as electronic reminders to state and federal permittees that may have missed their compliance monitoring report deadlines. More than 20 states currently use EPA's electronic reporting tool to collect DMRs and use these electronic compliance assistance reminders. Further, ICIS also provides email reminders to permittees that have an upcoming report due under their NPDES general permit.

- Smart Tools for Field Inspectors. These are software solutions to improve the effectiveness and efficiency of how EPA and states conduct Resource Conservation and Recovery Act (RCRA) Subtitle C (hazardous waste) inspections.

- Compliance Training for EPA and States. To ensure the quality of compliance monitoring activities, EPA develops national policies, updates inspection manuals, provides required training for inspectors, and issues inspector credentials. EPA's National Enforcement Training Institute (NETI) has provided online, e-learning courses for 2,500 EPA, state and tribal inspectors, and has made available over 165 online training courses in the NETI e-Learning Center for EPA and state, local, and tribal enforcement partners.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. Work in this program also supports the Agency Priority Goal Increase Environmental Law Compliance Rate. Through FY 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits to 21 percent from a baseline of 24 percent.

In FY 2019, EPA will continue to streamline its compliance monitoring activities such as field inspections, data tools, and assistance. EPA will focus principally on 1) those programs that are not delegated to states ("direct implementation"), and 2) where EPA's expertise or unique role is best suited to address the issue. This includes, but is not limited to, multi-state/multi-regional matters, issues of national significance, and emergency situations. In addition, EPA will provide some targeted oversight and support to state, local, and tribal programs. To accomplish this, the Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. Also, the Agency will maintain accessibility to ICIS for EPA, states, the public, and the tribes.

Also in FY 2019, the Agency expects to pilot the use of "informal" enforcement actions to address less serious violations, especially where EPA is directly implementing the program. Informal actions are when the government identifies in writing a violation by regulated entities and requests that they correct the violations, but the written request is not independently enforceable.

[26] For more information, refer to: https://www.epa.gov/compliance/npdes-ereporting.

In addition, the Agency will continue to implement Phase 2 of the NPDES Electronic Reporting Rule which covers the e-reporting rule permitting requirements for EPA and states on a prolonged schedule. EPA will work with states to evaluate and prioritize the development of additional electronic reporting tools that support states. EPA's centralized development of electronic reporting tools saves the states significant resources in development.

**Performance Measure Targets:**

| **(432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees not in significant noncompliance with their permit limits.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 76 | 79 |

| **(427) Number of regulatory sectors served by national web-based compliance assistance centers.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 17 | 18 |

| **(428) Number of in-person and live webinar trainings provided to states to expand capacity building.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 100 | 100 |

| **(409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 10,000 | 10,000 |

| **(433) By FY 2018, develop a compliance rate pilot in a second program (in addition to NPDES) and implement in FY 2019.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | Identify Pilot | Implement Pilot |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$2,632.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$17,233.0/ -109.3 FTE) This program change reflects a recognition that states conduct the vast majority of inspections, an EPA focus on direct implementation programs, and an increased reliance on technology rather than on-site inspections to monitor compliance.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); Asbestos Hazard Emergency Response Act; Atomic Energy Act; Clean Air Act; Certain Alaskan Cruise Ship Operations; Clean Water Act; Community Environmental Response Facilitation Act; Emergency Planning and Community Right-to-Know Act; Energy Policy Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries

Act; Mercury-Containing and Rechargeable Battery Management Act; National Environmental Policy Act; Noise Control Act; Oil Pollution Act; Program Fraud Civil Remedies Act; Residential Lead-Based Paint Disclosure Program; Resource Conservation and Recovery Act; Safe Drinking Water Act; Small Business Regulatory Enforcement Fairness Act; Small Business Liability Relief and Brownfields Revitalization Act; Toxic Substances Control Act; Uranium Mill Tailings Radiation Control Act; North American Agreement on Environmental Cooperation; La Paz Agreement on US/Mexico Border Region.

# Enforcement

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$172,309.6*** | ***$170,849.0*** | ***$140,677.0*** | ***-$30,172.0*** |
| Leaking Underground Storage Tanks | $584.7 | $616.0 | $589.0 | -$27.0 |
| Inland Oil Spill Programs | $2,342.8 | $2,397.0 | $2,219.0 | -$178.0 |
| Total Budget Authority | $175,237.1 | $173,862.0 | $143,485.0 | -$30,377.0 |
| Total Workyears | 1,061.0 | 1,080.4 | 857.1 | -223.3 |

## Program Project Description:

The overall goal of EPA's Civil Enforcement program is to maximize compliance with the nation's environmental laws and regulations to protect human health and the environment. EPA will seek to strengthen environmental partnerships with its state and tribal partners, encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, and pursue enforcement to deter future violations.

The Agency works closely with the U.S. Department of Justice, states, tribal governments, territories, and local agencies to ensure consistent and fair enforcement of all major environmental statutes, distinct programs under those statutes, and numerous regulatory requirements under those programs, which apply in various combinations to millions of regulated federal and private entities. The Civil Enforcement program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. Work in this program also supports the Agency Priority Goal Increase Environmental Law Compliance Rate.

In FY 2019, EPA will refocus efforts toward areas with significant noncompliance issues and where enforcement can address the most substantial impacts to human health and the environment. Recognizing the role of states and tribes as the primary implementers where authorized by EPA to implement the federal statutes, EPA will focus civil enforcement resources on direct implementation responsibilities and the most significant violations, and assisting authorized states and tribes in meeting national standards, such as by providing expertise and implementing compliance monitoring and civil enforcement strategies that will ensure a level playing field. EPA is responsible for direct implementation for programs that are not delegable or where a state or tribe has not sought or obtained the authority to implement a particular program (or program

component). Examples include the Clean Air Act (CAA) mobile source program, pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act, enforcement in Indian Country, enforcement of the federal Superfund cleanup program, and enforcement of non-delegated portions of various other laws, including the Resource Conservation and Recovery Act, the Clean Water Act, and the CAA.

Even for states and tribes authorized to implement a program, EPA serves a critical role in addressing serious national noncompliance problems, such as those affecting multiple states or tribes, and in serving as a backstop for instances when a state or tribe does not address serious noncompliance timely or appropriately. EPA also may assist a state or tribe in remedying noncompliance problems when it is unable to address the problem because it lacks the capability or resources, such as in actions against federal or state agencies. And for some serious violations, the Agency and states or tribes may decide that the best approach is a joint enforcement action. Further, EPA will take immediate action when there is an environmental emergency, such as an oil spill or chemical accident. In addition, EPA ensures cleanup (corrective action) at RCRA facilities. Closely coordinating with states, EPA can issue cleanup orders to RCRA facilities to help meet the RCRA corrective action program's goals. EPA also will pursue enforcement actions at federal facilities where significant violations are discovered and ensure that federal facilities are held to the same standards as the private sector and will provide technical and scientific support to states and tribes with authorized programs. The Agency also will carry out its statutory oversight responsibilities and offer assistance to states in their implementation of delegated programs when needed or in cases where the Agency maintains a unique expertise or capability.

**Performance Measure Targets:**

| **(426) Number of compliance assurance actions in accordance with EPA's civil enforcement response policies.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | 4,000 |

| **(434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 325 | 325 |

| **(431) By FY 2018, identify one or two direct implementation programs that use administrative and informal enforcement tools to pilot for reducing the time between identification of a violation to correction. Also in FY 2018, gather data to establish baselines against which to measure progress.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | Identify Pilot Program(s) and Establish Baselines | Implement Pilot |

| **(430) Average time to move EPA civil cases referred to the Department of Justice in FY 2013 or later to settlement or having a complaint filed (years).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | 3.0 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$5,641.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefit costs.

- (-$35,813.0/ -221.8 FTE) This program change reflects the fact that states are primary implementers of our nation's environmental laws. EPA will focus on matters affecting multiple states or tribes, serve as a backstop in instances when a state or tribe does not address serious noncompliance timely or appropriately, and assist a state or tribe in remedying noncompliance problems when it is unable to address the problem because it lacks the capability or resources. This change includes a reduction in resources for cases that do not meet these criteria.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); Asbestos Hazard Emergency Response Act; Atomic Energy Act; Clean Air Act; Certain Alaskan Cruise Ship Operations; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Energy Policy Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Mercury-Containing and Rechargeable Battery Management Act; National Environmental Policy Act; Noise Control Act; Oil Pollution Act; Residential Lead-Based Paint Disclosure Program; Resource Conservation and Recovery Act; Safe Drinking Water Act; Small Business Regulatory Enforcement Fairness Act; Small Business Liability Relief and Brownfields Revitalization Act; Toxic Substances Control Act; Uranium Mill Tailings Radiation Control Act; North American Agreement on Environmental Cooperation; La Paz Agreement on US/Mexico Border Region.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$48,039.2*** | ***$45,333.0*** | ***$41,107.0*** | ***-$4,226.0*** |
| Hazardous Substance Superfund | $6,815.3 | $7,135.0 | $7,135.0 | $0.0 |
| Total Budget Authority | $54,854.5 | $52,468.0 | $48,242.0 | -$4,226.0 |
| Total Workyears | 237.9 | 268.6 | 209.6 | -59.0 |

## Program Project Description:

EPA's Criminal Enforcement program enforces the nation's environmental laws through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment. EPA's criminal enforcement agents (Special Agents) investigate violations of environmental statutes and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice.

The agents are assisted in the Criminal Enforcement program by forensic scientists, attorneys, technicians, engineers, and other experts. EPA's criminal enforcement attorneys provide legal and policy support for all of the program's responsibilities, including forensics and expert witness preparation, to ensure that program activities are carried out in accordance with legal requirements and the policies of the Agency. These efforts support environmental crime prosecutions primarily by the United States Attorneys and the Department of Justice's Environmental Crimes Section. In FY 2017, the conviction rate for criminal defendants was 91 percent.[27]

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes. The Criminal Enforcement program will increase its collaboration and coordination with the Civil Enforcement program to ensure that EPA's Enforcement program identifies the most egregious cases and responds to them as effectively as possible. The Agency will perform targeted investigations of violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment.

[27] For additional information, refer to: http://www.epa.gov/enforcement/data-and-results.

**Performance Measure Targets**:

| (419) Percentage of criminal cases with individual defendants. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 75 | 75 |

| (418) Percentage of criminal cases having the most significant health, environmental, and deterrence impacts. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 65 | 65 |

| (421) Percentage of conviction rate for criminal defendants. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 85 | 85 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$4,739.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$8,965.0/ -59.0 FTE) This program change reflects a focus on the most egregious cases and increased coordination with the Civil Enforcement program, and a reduction in resources for small cases that have limited deterrence value.

**Statutory Authority:**

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Resource Conservation and Recovery Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Toxic Substances Control Act; Emergency Planning and Community Right-To-Know Act; Residential Lead-Based Paint Hazard Reduction Act; Federal Insecticide, Fungicide, and Rodenticide Act; Ocean Dumping Act (i.e., MPRSA); Pollution Prosecution Act; Title 18 General Federal Crimes (e.g., false statements, conspiracy); Powers of Environmental Protection Agency (18 U.S.C. 3063).

**NEPA Implementation**
Program Area: Enforcement
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$16,098.2*** | ***$16,130.0*** | ***$13,496.0*** | ***-$2,634.0*** |
| Total Budget Authority | $16,098.2 | $16,130.0 | $13,496.0 | -$2,634.0 |
| Total Workyears | 107.8 | 104.8 | 80.5 | -24.3 |

**Program Project Description:**

Pursuant to the National Environmental Policy Act (NEPA) and as mandated by Section 309 of the Clean Air Act, EPA's NEPA Implementation program coordinates the environmental review of major federal actions. The NEPA Implementation program guides EPA's compliance with NEPA, the National Historic Preservation Act, and other relevant statutes and Executive Orders. The program also manages the official Environmental Impact Statement (EIS) filing system for all federal EISs, in accordance with a Memorandum of Understanding with the Council on Environmental Quality (CEQ).[28] Additionally, the program manages the review of Environmental Impact Assessments of non-governmental activities in Antarctica, in accordance with the Antarctic Science, Tourism and Conservation Act.

The program uses and promotes *NEPAssist*, a geographic information system (GIS) tool developed to assist users (EPA, other federal agencies, and the public) with environmental reviews under NEPA. Approximately 900 users visit the website each month and 83 percent are return visitors. EPA also promotes *e-NEPA*, a web-based system for federal agencies to file EISs and to make comments on EISs accessible to the public on a centralized public website.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will focus its reviews on areas where EPA has statutory authority and expertise. EPA also will continue to work with OMB, CEQ, and other federal agencies to evaluate ways to coordinate, streamline, and improve the NEPA process. Additionally, EPA will continue to work with agencies as they implement the FAST-41 Act, which sets requirements to streamline infrastructure permitting project reviews.[29] EPA also will continue implementing Executive Order 13766: "Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects."[30]

[28] Memorandum of Agreement No. 1 Between The Council on Environmental Quality and The Environmental Protection Agency, October 1977.
[29] For additional information, refer to: https://www.gpo.gov/fdsys/pkg/PLAW-114publ94/pdf/PLAW-114publ94.pdf.
[30] For additional information, refer to: https://www.whitehouse.gov/the-press-office/2017/01/24/executive-order-expediting-environmental-reviews-and-approvals-high.

**Performance Measure Targets:**

| (429) Percentage of early Environmental Impact Statement (EIS) engagement | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 60 | 70 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$873.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$3,507.0/ -24.3 FTE) This program change streamlines the NEPA Implementation program. NEPA Implementation is proposed for transfer from the Office of Enforcement and Compliance Assurance to the Office of Policy as the Agency continues to support this program. This change will ensure staff are able to quickly elevate issues directly to the Administrator for resolution and allow the Agency to expedite environmental reviews and approvals of high-priority infrastructure projects, as directed by the President under Executive Order 13766.[31]

**Statutory Authority:**

National Environmental Policy Act (NEPA); Clean Air Act, § 309; Antarctic Science, Tourism, and Conservation Act; Clean Water Act, § 511(c); Endangered Species Act; National Historic Preservation Act; Archaeological and Historic Preservation Act; Fishery Conservation and Management Act; Fish and Wildlife Coordination Act; Fixing America's Surface Transportation Act Title 41.

[31] For additional information, refer to: https://www.whitehouse.gov/presidential-actions/executive-order-expediting-environmental-reviews-approvals-high-priority-infrastructure-projects/.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$6,401.5*** | ***$6,691.0*** | ***$2,000.0*** | ***-$4,691.0*** |
| Hazardous Substance Superfund | $732.9 | $554.0 | $0.0 | -$554.0 |
| Total Budget Authority | $7,134.4 | $7,245.0 | $2,000.0 | -$5,245.0 |
| Total Workyears | 34.9 | 40.3 | 0.0 | -40.3 |

## Program Project Description:

The Environmental Justice program fosters environmental and public health in communities disproportionately burdened by pollution by integrating and addressing issues of environmental programs and collaboration with interagency partners to develop guidance documents and tools to incorporate environmental justice considerations into decision making.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.2, Increase Transparency and Public Participation in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will use $2 million dedicated to the Environmental Justice program to support the Environmental Justice Small Grants program to support community-based organizations; Environmental Justice Technical Assistance for Communities to support the technical needs of low income, minority and tribal/indigenous populations; and address the continued maintenance and enhancement of environmental justice tools, such as EJSCREEN. This work will be accomplished within the Office of Policy. As cross-cutting organization, the Office of Policy can better ensure integration for the Environmental Justice program overall. This move will strengthen and complement the work already being done by the Office of Community Revitalization (formerly the Office of Sustainable Communities) within the Office of Policy, and provide better support to communities as they work to improve health, protect the environment and grow their economies.

## Performance Measure Targets:

Currently there are no performance measures specific to this program.

## FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (-$289.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$4,402.0/ -36.8 FTE) This net program change reflects the proposed transfer of the Environmental Justice program from the Office of Enforcement and Compliance Assurance into the Office of Policy. The Office of Policy can ensure integration across the full range of EPA's programs. The budget request maintains support for financial assistance grants to community-based organizations and technical assistance to low income, minority, and tribal/indigenous populations.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended.

# Geographic Programs

**Geographic Program: Chesapeake Bay**
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$66,773.5*** | ***$72,504.0*** | ***$7,300.0*** | ***-$65,204.0*** |
| Total Budget Authority | $66,773.5 | $72,504.0 | $7,300.0 | -$65,204.0 |
| Total Workyears | 37.3 | 39.9 | 0.0 | -39.9 |

**Program Project Description:**

The Chesapeake Bay Program is a voluntary partnership, initiated in 1983, that now includes the Chesapeake Bay watershed states (Delaware, Maryland, New York, Virginia, Pennsylvania, and West Virginia), the District of Columbia, the Chesapeake Bay Commission, and the federal government. EPA represents the federal government on the partnership's Chesapeake Executive Council (EC) and, under the authority of Section 117 of the Clean Water Act, works with the EC to coordinate activities of the partnership. On June 16, 2014, the Chesapeake Bay Program partners signed the most recent Chesapeake Bay Watershed Agreement,[32] which provides for the first time the Bay's headwater states (Delaware, New York, and West Virginia) with full partnership in the Bay program. The Agreement establishes 10 goals and 31 outcomes for sustainable fisheries, water quality, vital habitats, climate change, toxic contaminants, and other areas.

EPA, the watershed jurisdictions, and other key federal agencies set two-year milestones for water quality to support the Bay Total Maximum Daily Load and the jurisdictions' Watershed Implementation Plans.[33] The TMDL satisfies a requirement of the Clean Water Act and EPA commitments under Court-approved consent decrees for Virginia and Washington, D.C. dating to the late 1990s.[34] The TMDL is designed to ensure all nitrogen, phosphorus, and sediment pollution control efforts needed to fully restore the Bay and its tidal rivers are in place by 2025.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA is requesting $7.3 million for support of state and local collection of water quality monitoring data and coordination of science, research, and modeling.

[32] The Chesapeake Bay Watershed Agreement (2014) available at http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-HIres.pdf.
[33] The federal milestones related to water quality in the Chesapeake Bay watershed are available at http://executiveorder.chesapeakebay.net/EO_13508_Water_Quality_Milestones-2012-01-06.pdf. The jurisdictional milestones are available at http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/EnsuringResults.html.
[34] The Chesapeake Bay TMDL available at http://www.epa.gov/chesapeakebaytmdl/.

The $7.3 million requested in FY 2019 would support the following activities:

- Water quality monitoring ($5.2 million). This funding would leverage between $10-$12 million in combined federal, state, and local funds.
  - Tidal and non-tidal monitoring ($4.8 million).
  - Submerged Aquatic Vegetation (SAV) monitoring ($400 thousand).
- Provide facilitation to build capacity at the state level ($2.1 million).
  - Coordinate modeling, decision support services, data collection, analysis, storage, and access;
  - Support information dissemination and transparency; and
  - Provide consistency and efficiency in communications and data management.

The activities described above would help protect the important investment that federal, state and local governments have made in providing clean and safe water. These activities also support the Goal 3 Rule of Law and Process. Environmental results are measured through data collected by the states and shared with the federal government. This information also will support measuring progress toward existing Agency nutrient and sediment performance goals and measures as well as other Chesapeake Bay Agreement outcome indicators.

In FY 2017, Chesapeake Bay Program partners surpassed their phosphorus- and sediment-reducing goals. Nitrogen reductions, however, fell short of the target for the fifth year in a row, due in large part to a gap in reported and implemented agricultural best management practices in Pennsylvania.

By the end of FY 2018, the program expects to achieve 60 percent of its goals for implementing nitrogen, phosphorus and sediment reduction actions to achieve final TMDL allocations, as measured through the Partnership's Phase 5.3.2 Chesapeake Bay Watershed Model.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$65,204.0/ -39.9 FTE) This program change reduces funding for the Chesapeake Bay Program. Remaining resources will support critical activities in water quality monitoring.

**Statutory Authority:**

Clean Water Act, Section 117; Estuary Restoration Act of 2000, as amended; Chesapeake Bay Accountability and Recovery Act of 2014; Clean Air Act of 1970; Consolidated and Further Continuing Appropriations Act, 2015, P.L. 113-235.

**Geographic Program: Gulf of Mexico**
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$3,395.8*** | ***$8,484.0*** | ***$0.0*** | ***-$8,484.0*** |
| Total Budget Authority | $3,395.8 | $8,484.0 | $0.0 | -$8,484.0 |
| Total Workyears | 12.0 | 14.3 | 0.0 | -14.3 |

**Program Project Description:**

The efforts of EPA's Gulf of Mexico Program Office (GMPO) are dedicated to the protection, restoration and enhancement of the water bodies and coastal environments associated with the greater Gulf of Mexico region.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. EPA will encourage the five Gulf of Mexico states to continue to make progress in restoring the Gulf of Mexico from within core water programs.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$8,484.0/ -14.3 FTE) This program change eliminates the Gulf of Mexico program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

**Statutory Authority:**

Clean Water Act.

## Geographic Program: Lake Champlain

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$4,395.0*** | ***$4,369.0*** | ***$0.0*** | ***-$4,369.0*** |
| Total Budget Authority | $4,395.0 | $4,369.0 | $0.0 | -$4,369.0 |

**Program Project Description:**

EPA supports efforts to protect Lake Champlain through partnerships to implement the "Opportunities for Action" management plan. The plan was developed to bring together people with diverse interests in the lake to create a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin.

**FY 2019 Activities and Performance Plan:**

Resources have been eliminated for this program in FY 2019. EPA will encourage New York and Vermont to continue to make progress in restoring Lake Champlain from within core water programs.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$4,369.0) This program change eliminates the Lake Champlain program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

**Statutory Authority:**

1909 Boundary Waters Treaty; Clean Water Act.

## Geographic Program: Long Island Sound

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$7,989.8*** | ***$7,946.0*** | ***$0.0*** | ***-$7,946.0*** |
| Total Budget Authority | $7,989.8 | $7,946.0 | $0.0 | -$7,946.0 |

**Program Project Description:**

EPA and the States of Connecticut and New York work in partnership to restore and protect Long Island Sound. EPA assists states in implementing the Long Island Sound's Comprehensive Conservation and Management Plan by coordinating the cleanup and restoration actions of the Long Island Sound Study Management Conference.

**FY 2019 Activities and Performance Plan:**

Resources have been eliminated for this program in FY 2019. EPA will encourage Long Island Sound states and local entities to continue to make progress in restoring the Sound from within core water programs.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$7,946.0) This program change eliminates the Long Island Sound program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

**Statutory Authority:**

Clean Water Act.

**Geographic Program: Other**

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$6,394.7*** | ***$7,343.0*** | ***$0.0*** | ***-$7,343.0*** |
| Total Budget Authority | $6,394.7 | $7,343.0 | $0.0 | -$7,343.0 |
| Total Workyears | 3.8 | 4.9 | 0.0 | -4.9 |

## Program Project Description:

Under this program, the Agency develops and implements approaches to mitigate pollution for specific and targeted geographic areas, including the Northwest Forest Program, Lake Pontchartrain Basin Restoration Program, and the Southeast New England Coastal Watershed Restoration Program.

Northwest Forest Program

The Northwest Forest Program supports interagency and intergovernmental efforts that coordinate and leverage resources for water quality and drinking water efforts in seven[35] western states.

Lake Pontchartrain Basin Restoration Program

The Lake Pontchartrain Basin Restoration Program, through a collaborative and voluntary effort, strives to restore ecological health by developing and funding restoration projects within the sixteen parishes in the basin.

Southeast New England Coastal Watershed Restoration Program (SNECWRP)

The Southeast New England Program serves as a hub to enable protection and restoration of the coastal watersheds of Southeast New England, including the ecosystem services that sustain the region's communities.

## FY 2019 Activities and Performance Plan:

Resources and FTE have been eliminated for this program in FY 2019. EPA will encourage states and local entities to continue to make progress in restoring these major aquatic ecosystems from within core water programs.

[35] California, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$7,343.0 / -4.9 FTE) This program change eliminates the Geographic Other program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

**Statutory Authority:**

Clean Water Act.

## Geographic Program: Puget Sound

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$27,971.9*** | ***$27,810.0*** | ***$0.0*** | ***-$27,810.0*** |
| Total Budget Authority | $27,971.9 | $27,810.0 | $0.0 | -$27,810.0 |
| Total Workyears | 6.6 | 6.0 | 0.0 | -6.0 |

**Program Project Description:**

The Puget Sound Program works with partners to implement the Puget Sound Action Agenda, the long-term plan for Puget Sound basin protection and restoration. In addition, the Puget Sound Program funds assistance agreements with the federally recognized tribes in Puget Sound, Tribal consortia, and the North West Indian Fisheries Commission.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. EPA will encourage state, tribal, and local entities to continue to make progress in restoring the Puget Sound from within core water programs.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$27,810.0/ -6.0 FTE) This program change eliminates the Puget Sound program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

**Statutory Authority:**

Clean Water Act.

## Geographic Program: San Francisco Bay

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$4,493.7*** | ***$4,786.0*** | ***$0.0*** | ***-$4,786.0*** |
| Total Budget Authority | $4,493.7 | $4,786.0 | $0.0 | -$4,786.0 |
| Total Workyears | 1.9 | 1.9 | 0.0 | -1.9 |

**Program Project Description:**

EPA collaborates with agencies and non-governmental organizations to implement the seven-point *Bay Delta Action Plan* (2012)[36] designed to protect and restore water quality, aquatic life, and ecosystem processes in the San Francisco Bay/Sacramento-San Joaquin Delta. EPA assists the State Water Resources Control Board with the comprehensive update of the Bay Delta Water Quality Control Plan.[37]

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. EPA will encourage the state of California and local entities to continue to make progress in restoring the San Francisco Bay from within core water programs.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$4,786.0/ -1.9 FTE) This program change eliminates the San Francisco Bay program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

**Statutory Authority:**

Clean Water Act.

[36] EPA Bay Delta Action Plan (2012). http://www2.epa.gov/sfbay-delta/bay-delta-action-plan.
[37] State Water Board Bay Delta Water Quality Control Plan.
http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/.

## Geographic Program: South Florida

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$1,624.0*** | ***$1,692.0*** | ***$0.0*** | ***-$1,692.0*** |
| Total Budget Authority | $1,624.0 | $1,692.0 | $0.0 | -$1,692.0 |
| Total Workyears | 1.1 | 1.4 | 0.0 | -1.4 |

**Program Project Description:**

EPA's South Florida program coordinates restoration activities in South Florida, including the Florida Keys.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. EPA will encourage state, tribal, and local entities to continue to make progress in protecting and restoring sensitive aquatic ecosystems in South Florida from within core water programs.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,692.0/ -1.4 FTE) This program change eliminates the South Florida program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

**Statutory Authority:**

Florida Keys National Marine Sanctuary and Protection Act of 1990; Clean Water Act; Water Resources Development Act of 1996; Water Resources Development Act of 2000.

**Great Lakes Restoration**
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$353,207.0*** | ***$297,963.0*** | ***$30,000.0*** | ***-$267,963.0*** |
| Total Budget Authority | $353,207.0 | $297,963.0 | $30,000.0 | -$267,963.0 |
| Total Workyears | 74.3 | 71.7 | 5.0 | -66.7 |

## Program Project Description:

The Great Lakes are the largest system of surface freshwater on Earth, containing 20 percent of the world's surface freshwater and 95 percent of the United States' surface freshwater. The watershed includes two nations, eight U.S. states, two Canadian provinces, and more than 35 tribes and tribal organizations.

Through a coordinated interagency process led by EPA, this program establishes a Great Lakes system-wide surveillance network to monitor the water quality of the Great Lakes.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. EPA will support states and tribes through Great Lakes system-wide monitoring for the improved collection, evaluation, management, and reporting of Great Lakes environmental information. By supporting programs that measure and assess the physical, biological, and chemical integrity of the Great Lakes, this program will link numerous existing Great Lakes monitoring activities to improve the scientific basis for policy decisions by environmental managers.

The Agency will partner with agencies involved in Great Lakes monitoring and natural resource management including states and tribes and, as appropriate, federal agencies such as NOAA, BIA, and USGS. This coordinated monitoring function is assigned to the federal government under Section 118 of the Clean Water Act and under the Great Lakes Water Quality Agreement. It also is a unique federal function because it involves coordination and collaboration among 8 states, numerous local governments, 35 tribes and tribal organizations, and Canada. Increased state involvement will embody cooperative federalism by better targeting resources to state and regional needs. As appropriate, EPA can invest in state monitoring infrastructure that supports public health, environmental benefits, and economic growth.

This work will measure and assess the overall results of activities that affect the environmental condition of the Great Lakes. A successful monitoring system requires the ability to perform an

overall assessment of the Great Lakes, particularly when it can be used to support environmental management decisions that improve the environment and allow economic growth. Performance can be assessed annually through the State of the Great Lakes report. The United States and Canada, together with many partners have a suite of 9 indicators of ecosystem health, supported by 44 sub-indicators to assess the state of the Great Lakes. Maintaining this annual assessment will help Governments evaluate the effectiveness of existing programs, policies and practices and to address, inform, and engage others. Objectives for ongoing activities in FY 2019 are listed below:

- Continuation and enhancement of the long-term trend monitoring that is needed to assess Great Lakes environmental conditions. This includes monitoring for detection of invasive species and for nutrients that contribute to harmful algal blooms.
- Building state monitoring capacity to participate in and lead regional collection, evaluation, management, and reporting of Great Lakes environmental information.
- Enhancement coordination, and management of Great Lakes data systems for the benefit of environmental decision makers and the public.

Numerous accomplishments under the GLRI in FY 2017 advanced priorities in the FY 2018-2022 Strategic Plan such as: working with partners to protect and restore wetlands; conducting monitoring and assessment so we know the status of the nation's waters; enhancing shared accountability; and increasing transparency and public participation. GLRI accomplishments included:

- Since 2010, the Presque Isle (PA), Deer Lake (MI), and White Lake (MI) AOCs have been delisted. In addition, federal agencies and their partners have completed the cleanup and restoration actions necessary for delisting at seven additional AOCs, including three in FY 2017: River Raisin (MI), St. Marys River (MI), and Lower Menominee, (MI/WI).
- Since 2010, a total of 66 Beneficial Use Impairments (BUIs), at 24 AOCs in the eight Great Lakes States, have been removed, more than six times the total number of BUIs removed in the preceding 22 years. Eight BUIs were removed in FY 2017 at: Black River, OH (2); St. Marys River, MI; Lower Menominee River, MI/WI (2); St. Clair River, MI (2); and Rochester Embayment, NY.
- Since 2010, over 4 million cubic yards of contaminated sediment (over 51,000 in FY 2017) has been remediated through GLRI-associated projects.
- Since 2010, GLRI partners implemented invasive species control activities on over 134,000 acres, more than 18,000 in FY 2017.
- GLRI has been central to efforts that keep self-sustaining populations of silver, bighead, and black carp out of the Great Lakes.
- Since 2015, GLRI has implemented projects that have resulted in a projected reduction of over 767,000 pounds of phosphorus (over 360,000 in FY 2017) which contributes to harmful algal blooms around the Great Lakes in priority watersheds.
- Since 2010, more than 225,000 acres of habitat (over 40,000 in FY 2017), including coastal wetlands, have been protected, restored, or enhanced.
- In FY 2017, EPA worked with 4 Federal Agencies and 5 States to develop Lake Erie phosphorus reduction plans to meet a binational 40 percent phosphorus reduction target.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,012.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$266,951.0/ -66.7 FTE) This program change reduces support for the Great Lakes Program. This returns responsibility for local environmental efforts to state and local entities.

**Statutory Authority:**

Clean Water Act as amended, including references to Great Lakes Water Quality Agreement.

# Homeland Security

## Homeland Security: Communication and Information

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$3,480.0*** | ***$3,834.0*** | ***$3,511.0*** | ***-$323.0*** |
| Total Budget Authority | $3,480.0 | $3,834.0 | $3,511.0 | -$323.0 |
| Total Workyears | 12.2 | 11.7 | 11.3 | -0.4 |

### Program Project Description:

This program supports EPA's coordination and communication activities related to homeland security. The White House, Congress, and the Department of Homeland Security (DHS) have defined responsibilities for EPA in the event of a homeland security incident through a series of statutes, presidential directives, and national plans. The Office of Homeland Security (OHS) leads and coordinates EPA's engagement with the White House and other federal departments and agencies on the development of new homeland security policy and requirements. As EPA Federal Intelligence Coordination Office (FICO), OHS coordinates analytic intelligence support capacity across the Agency to meet EPA requirements and EPA whole-of-government obligations.

EPA uses both the Homeland Security Executive Steering Committee, composed of senior executives from the program and regional offices, and the Homeland Security Collaborative Network (HSCN), a cross-agency leadership group, to support its ability to implement EPA's broad range of homeland security responsibilities, ensure consistent development and implementation of homeland security policies and procedures, avoid duplication, and build a network of partnerships.

Homeland security information technology efforts are closely coordinated with the agencywide information security and infrastructure activities, which are managed in the Information Security and Information Technology (IT)/Data Management programs. These IT support programs also enable video contact among localities, EPA Headquarters, Regional offices, and laboratories in emergency situations.

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA's Homeland Security Program will:

- Ensure a coordinated approach to EPA's homeland security activities and resources that align with government-wide homeland security priorities and requirements.

- Support federal, state, tribal, and local efforts to prevent, protect, mitigate, respond to, and recover from natural disasters, acts of terrorism, and other emergencies by providing leadership and coordination across EPA's program offices and regions.

- Ensure appropriate Agency representation in various White House and other federal homeland security policy activities.

- Focus on filling critical knowledge and technology gaps that may be essential for an effective EPA response, including working with our interagency partners to define collective capabilities and resources that may contribute to closing common homeland security gaps.

- Provide EPA end-users with relevant, accurate, reliable, objective, and timely intelligence bearing on matters of environmental policy and regulation, domestic threats and counterintelligence, where EPA functions to preserve or assist in the restoration of human health and the environment.

- Continue phased implementation of Executive Order 13587 (*Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information*) to meet the main pillars of classified information protection with a focus on the implementation of an Insider Threat Program (ITP) to address and mitigate threats to national security.

- Track emerging national/homeland security issues, through close coordination with the U.S. Intelligence Community, to anticipate and avoid crisis situations and target the Agency's efforts proactively against threats to the United States.

EPA's FY 2019 resources support national cybersecurity efforts through monitoring across the Agency's IT infrastructure to detect, remediate, and eradicate malicious software or Advanced Persistent Threats (APT) from EPA's computer and data networks and through improved detection capabilities. EPA will enhance internal Computer Security Incident Response Capability (CSIRC) to ensure rapid identification and reporting of suspicious activity and will increase training and awareness of cybersecurity threats. EPA's personnel are active participants in Government Forum of Incident Response Teams (GFIRST), a DHS-led group of experts from incident response and security response teams. Indicators and warnings are shared between EPA incident responders and their cleared counterparts in other agencies and with the Intelligence Community.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$181.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$171.0/ -0.4 FTE) This program change reduces resources for activities related to communication, policies, and procedures to support and coordinate homeland security efforts across the Agency.

- (-$333.0) This program change is a reduction to IT efforts coordinating homeland security across the Agency. The Agency will refocus on core functions that improve foundational capabilities and close gaps in IT security architecture.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Resource Conservation and Recovery Act (RCRA), §§ 1001, 2001, 3001, 3005; Safe Drinking Water Act (SDWA); Clean Water Act, §§ 101, 102, 103, 104, 105, 107; Clean Air Act, §§ 102, 103, 104, 108; Toxic Substances Control Act (TSCA), §§ 201, 301, 401; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), §§ 136a-136y; Bio Terrorism Act of 2002, §§ 303, 305, 306, 307; Homeland Security Act of 2002; Post-Katrina Emergency Management Reform Act; Defense Against Weapons of Mass Destruction Act; Food Safety Modernization Act, § 208.

**Homeland Security: Critical Infrastructure Protection**

Program Area: Homeland Security
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$936.9*** | ***$956.0*** | ***$1,263.0*** | ***$307.0*** |
| Science & Technology | $9,950.4 | $9,153.0 | $5,216.0 | -$3,937.0 |
| Total Budget Authority | $10,887.3 | $10,109.0 | $6,479.0 | -$3,630.0 |
| Total Workyears | 22.5 | 23.1 | 18.1 | -5.0 |

## Program Project Description:

This program supports EPA's efforts to coordinate and provide technical expertise to enhance the protection of the nation's critical water infrastructure from terrorist threats and all-hazard events through effective information sharing and dissemination. The program provides water systems with current information on methods and strategies to build preparedness for natural and manmade threats.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will build capacity to identify and respond to threats to critical national water infrastructure by:

- Providing timely information on contaminant properties, water treatment effectiveness, detection technologies, analytical protocols, and laboratory capabilities;
- Supporting effective communication conduits to disseminate threat and incident information and to serve as a clearinghouse for sensitive information;
- Promoting information sharing between the water sector and environmental professionals, scientists, emergency services personnel, law enforcement, public health agencies, the intelligence community, and technical assistance providers. Through this exchange, water systems can obtain up-to-date information on current technologies in water security, accurately assess their vulnerabilities to terror acts, and work cooperatively with public health officials, first responders, and law enforcement officials to respond effectively in the event of an emergency;
- Providing water utilities of all sizes access to a comprehensive range of important materials, including the most updated information, tools, training, and protocols designed to enhance the security, preparedness, and resiliency of the water sector; and
- Ensuring that water utilities receive timely and informative alerts about changes in the homeland security advisory level or about regional and national trends in certain types of water-related incidents. For example, should there be types of specific, water-related

threats or incidents that are recurring, EPA, in coordination with DHS and other appropriate agencies, needs to alert the utilities of the increasing multiple occurrences or "trends" of these incidents.

Effective information sharing protocols allow the water sector not only to improve their understanding of the latest water security and resiliency protocols and threats, but also to reduce their risk by enhancing their ability to prepare for an emergency.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$9.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (+$298.0/ +2.0 FTE) This program change reflects an increase to carry out EPA's mission as the Sector-Specific Agency for drinking water and wastewater infrastructure security. Funding is critical to protect water infrastructure from natural disasters and terrorist threats.

**Statutory Authority:**

Safe Drinking Water Act (SDWA), §§ 1431-1435; Clean Water Act; Public Health Security and Bioterrorism Emergency and Response Act of 2002; Emergency Planning and Community Right-to-Know Act (EPCRA), §§ 301-305.

## Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$4,918.0*** | ***$5,336.0*** | ***$4,986.0*** | ***-$350.0*** |
| Science & Technology | $438.0 | $446.0 | $500.0 | $54.0 |
| Building and Facilities | $6,119.2 | $6,631.0 | $6,176.0 | -$455.0 |
| Hazardous Substance Superfund | $1,306.2 | $934.0 | $934.0 | $0.0 |
| Total Budget Authority | $12,781.4 | $13,347.0 | $12,596.0 | -$751.0 |
| Total Workyears | 5.9 | 12.2 | 12.2 | 0.0 |

### Program Project Description:

EPA maintains a robust physical security and preparedness infrastructure, ensuring that its numerous facilities are secured and protected in line with the federally-mandated Interagency Security Committee (ISC) standards.

In order to secure and protect EPA's personnel and physical infrastructure, the Agency operates a federally mandated Personal Identity Verification (PIV) program, which adheres to the requirements as set forth in Homeland Security Presidential Directive 12 (HSPD-12). This program ensures the Agency is in compliance with government-wide standards for the issuance of secure and reliable forms of identification to federal employees and contractors who require access to federally controlled facilities and networks. Additionally, EPA initiates and adjudicates personnel background investigations, processes fingerprint checks, determines individual eligibility to access classified National Security Information (NSI), and maintains personnel security records for all federal and non-federal employees.

The NSI Program manages and safeguards EPA's classified information for its federal workforce and contractors. The Program ensures federal mandates are followed to protect national security information, conduct federally mandated training, and conduct NSI inspections.

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. As part of nationwide protection of buildings and critical infrastructure, EPA performs vulnerability assessments on facilities each year. Through this program, the Agency also recommends security risk mitigations, oversees access control measures, determines physical security measures for new construction and leases, and manages the lifecycle of security equipment. EPA is entering into a multi-year modernization

effort to implement enterprise-wide Physical Access Control Systems (PACS) in all facilities in five years.

EPA's PIV Program ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into EPA-controlled physical space and networks. It provides EPA the ability to produce and maintain secure and reliable forms of identification as required per HSPD-12, for all EPA employees and contractors. EPA will begin migrating the existing Agency PIV program to GSA's managed service *USAccess*, and expects full implementation within two years of initiation. Participating in this shared service ensures that EPA will be consistent with other government agencies and will be able to comply with new legislation or GSA requirements timely and in a manner that does not diminish core activities.

EPA is complying with 5 CFR 1400, which requires that federal and non-federal positions are re-designated for both risk and sensitivity and that personnel have appropriate background investigations commensurate with their position's risk and sensitivity designation. EPA will continue to manage the personnel security, suitability, fitness and NSI programs and conduct background investigations following appropriate federal guidance, ensuring that personnel are properly investigated for the positions they encumber and that classified material and activity is properly handled. As federal guidelines and policies change or are introduced, the systems supporting background investigations and the NSI program will be updated and enhanced as needed.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$350.0) This program change reduces funding for physical security and preparedness infrastructure. The Agency will focus on performing the highest priority annual facility assessments.

**Statutory Authority:**

Intelligence Reform and Terrorism Prevention Act of 2004; Privacy Act of 1974; REAL ID Act of 2005; Homeland Security Act of 2002; Americans with Disabilities Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Information Exchange

## Children and Other Sensitive Populations: Agency Coordination

Program Area: Information Exchange / Outreach
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$6,294.6*** | ***$6,504.0*** | ***$2,018.0*** | ***-$4,486.0*** |
| Total Budget Authority | $6,294.6 | $6,504.0 | $2,018.0 | -$4,486.0 |
| Total Workyears | 19.2 | 21.8 | 6.9 | -14.9 |

### Program Project Description:

The program coordinates and advances the protection of children's environmental health across EPA by: assisting with developing regulations; improving risk assessment and science policy; implementing community-level programs; and tracking and communicating measures, indicators, and progress on children's health. In addition, the Children's Health program is directed by EPA's *Policy on Evaluating Health Risks to Children*, Executive Order 13045 *Protection of Children's Health from Environmental Health Risks and Safety Risks*, EPA's memorandum *EPA's Leadership in Children's Environmental Health*, and other existing guidance.[38]

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace. In FY 2019, the Children's Health program will:

- Continue to serve as co-lead for the interagency efforts of the President's Task Force on Environmental Health Risks and Safety Risks to Children alongside the Department of Health and Human Services. This effort will focus on co-chairing the Senior Steering Committee and implementing priority strategies, including the *Key Federal Programs to Reduce Childhood Lead Exposures and Eliminate Associated Health Impacts*.[39] Implementation efforts associated with federal initiatives may be supported by other Task Force agencies or EPA program offices.
- Identify both potential health benefits and/or health risks to children during the development of Agency regulations and policies with targeted participation on regulatory workgroups.

[38] For more information: https://www.epa.gov/children/history-childrens-environmental-health-protection-epa.
[39] Key Federal Programs to Reduce Childhood Lead Exposures and Eliminate Associated Health Impacts Report: https://ptfceh.niehs.nih.gov/features/assets/files/key_federal_programs_to_reduce_childhood_lead_exposures_and_eliminate_associated_health_impactspresidents_508.pdf. New federal strategy to eliminate childhood lead exposure expected to be released in FY2018.

- Coordinate two in-person plenary meetings of the Children's Health Protection Advisory Committee (CHPAC).[40]

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$262.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce cost for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$4,224.0/ -14.9 FTE) This program change reflects a reduction in the Children's Health program due to streamlining activities including: 1) the Pediatric Environmental Health Specialty Units; 2) grants to state or local organizations; 3) IRIS reviews; 4) regionally-selected community-based projects addressing local children's environmental health issues; 5) indicators presented in *America's Children and Environment* and *America's Children: Key National Indicators of Well-Being*; and 6) other streamlined efforts.

**Statutory Authority:**

Toxic Substances Control Act (TSCA); Safe Drinking Water Act (SDW); Comprehensive Environmental Response, Compensation, and Liability Act; Federal Insecticide (CERCLA), Fungicide, and Rodenticide Act (FIFRA); and the Food Quality Protection Act.

[40] For more information: https://www.epa.gov/children/childrens-health-protection-advisory-committee-chpac.

**Exchange Network**
Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$16,483.8*** | ***$16,578.0*** | ***$11,784.0*** | ***-$4,794.0*** |
| Hazardous Substance Superfund | $1,316.3 | $1,319.0 | $1,319.0 | $0.0 |
| Total Budget Authority | $17,800.1 | $17,897.0 | $13,103.0 | -$4,794.0 |
| Total Workyears | 28.7 | 30.2 | 30.2 | 0.0 |

## Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal and territorial partners to exchange and share environmental data over the Internet. Capitalizing on advanced technology, data standards, open-source software, shared and portal services for the E-Enterprise business strategy, and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision making.

The Central Data Exchange (CDX)[41] is the largest component of the EN program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective enterprise architecture for the Agency by avoiding the creation of duplicative services. It also provides a set of value-added features and services that enable faster and more efficient transactions for internal and external clients of EPA, resulting in reduced burden.

CDX data exchange services are leveraged by EPA's programs, regions, states, tribes, territories and other federal agencies to meet their different business needs. With CDX, a stakeholder can submit data through one centralized point of access, exchange data with target systems using web services and utilize publishing services to share information collected by EPA and other stakeholders. By managing loosely connected and interoperable services, data exchange needs can be met using one or all of the available services such as:

- User registration;
- External user identity management;
- Electronic signature;
- Encryption and transmission;
- Virtual exchange services (VES); and
- Data quality assurance.

[41] For more information on the Central Data Exchange, please visit: http://www.epa.gov/cdx/.

Working in concert with CDX are EPA's System of Registries, which are centralized shared data services to improve data quality in EPA, state, and tribal program data, while promoting burden reduction for the reporting community. The following registries manage shared data centrally for reuse by the following EN partners:

- Facility Registry Service (FRS);
- Substance Registry Services (SRS);
- Tribes;
- Laws and Regulations Services (LRS);
- Terminology Services (TS);
- Reusable Component Services (RCS);
- Environmental Dataset Gateway (EDG);
- Registry of EPA Applications, Models, and Databases (READ); and
- Data Element Registry Services (DERS)

These shared data services catalog entities routinely referenced by EPA and EN partners, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which when integrated into EPA and partner applications fosters data consistency and data quality as well as enabling data integration. By integrating these shared data services into their online reporting forms, EPA and its EN partners make it easier for the reporting community to discover the correct information to submit, reducing burden, which enables reuse by partner programs.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to support core functions for the EN IT systems. The potential for burden reduction and savings from IT improvements are significant. Schedules and plans for upgrades and modernization will be adjusted to align with resources. As part of the E-Enterprise business strategy, EPA will continue to carry out the baseline support for the following projects under the EN program: roll out of Federated Identity Management system for EPA and its partners; promote existing shared facility and substance identification services that improve quality and reduce burden on states and tribes; utilize current services for EPA's Laws and Regulations registry, which will standardize identification of and associations between regulations, laws, and EPA's programs; and deploying established reusable electronic signature services to streamline Cross-Media Electronic Reporting Regulation (CROMERR) compliance. Advancements in data transport services, such as Virtual Exchange Services, will continue to provide cloud-based solutions for EPA's state and tribal partners. Examples of important enhancements that could greatly streamline operations for states, tribes, industry and the Agency include a tool that helps industry identify potentially applicable regulations, and electronic filing capacity for imports and exports of environmentally sensitive products through the DHS/US Customs system, which reduces processing time from days or weeks to minutes or days.

In FY 2019, EPA will:

- Support existing outreach activities to increase awareness of CROMERR services and the savings to states and tribes from using these services; and
- Approve essential CROMERR applications from authorized programs that propose to use EPA's shared CROMERR services and assist co-regulators with integrating these services into their systems.

CROMERR activities are intended to assist states and tribes in the development activities associated with establishing a point of presence, exchanging data on the Network, and supporting local electronic reporting programs in a more cost effective way.

EPA will prioritize areas of support for the System of Registries and partner applications. Keeping the information current in the registries requires constant maintenance and research. This includes:

- An adjusted schedule for priority updates to EPA's enterprise dataset registry, the Environmental Dataset Gateway, to meet EPA's priority of improving data accessibility, achieve compliance with Open Data Policy requirements (OMB M-13-13) and pursue the establishment of an administrative dataset registry; and
- Maintaining the list of previously entered IT resources, on an adjusted schedule, through its catalog of IT services (e.g., widgets, web services, reusable code). The Reusable Component Services is a resource that enables EPA and its EN partners to reuse standard system functions in whole or in part, thus saving money and time for states and tribal governments and EPA.

EPA also will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain systems that support the importation process of products that are of dual interest to EPA and CBP. Due to the successful conclusion of the limited pilot test for electronic reporting and processing of EPA-regulated imports for vehicles and engines, pesticides and toxic substances, EPA will continue to support mission essential activities of the program in FY 2019. Such electronic reporting will aid regional enforcement coordinators by automating what is currently a manual review process and allow them to focus on key high-value monitoring and targeting activities for noncompliant imports.

In FY 2019, the EN program will continue to be a pivotal component of the E-Enterprise for the Environment strategy that supports business process change agencywide. E-Enterprise is a transformative 21st century strategy – jointly governed by states, tribes, and EPA – that rethinks how government agencies deliver environmental protection. Under this strategy, the Agency will streamline its business processes and systems to reduce reporting burden on states and regulated facilities, and improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. In this context, the Agency will maintain the E-Enterprise Portal that transforms the EN to a more open platform of services and make environmental data reporting, sharing and analysis faster, simpler and less expensive.

**Performance Measure Targets**:

| (053) Number of states, tribes and territories able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 110 | 115 |

| (052) Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 85 | 90 |

| (999) Number of active unique users from states, tribes, laboratories, regulated facilities and other entities that electronically report environmental data to EPA through CDX. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 100,000 | 110,000 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$583.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5,377.0) This program change modifies the timeline to address required modifications to the Exchange Network IT systems; streamlines quality assurance of registries; refocuses modernization efforts; and reduces the collection and exchange of environmental data with states, tribes, and regulated entities.

**Statutory Authority:**

Federal Information Security Management Act (FISMA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); Controlled Substances Act (CSA); The Privacy Act of 1974; Freedom of Information Act (FOIA).

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$47,207.3*** | ***$46,398.0*** | ***$39,431.0*** | ***-$6,967.0*** |
| Total Budget Authority | $47,207.3 | $46,398.0 | $39,431.0 | -$6,967.0 |
| Total Workyears | 284.4 | 309.4 | 235.6 | -73.8 |

**Program Project Description:**

This program supports various offices that provide direct executive and logistical support to EPA's Administrator. In addition to the Administrator's Immediate Office (IO), resources in this program support the Office of Congressional and Intergovernmental Relations (OCIR), Office of Administrative and Executive Services, Office of the Executive Secretariat, the Office of Public Affairs, and the Office of Public Engagement.

This program also supports EPA's Regional Administrators' offices. The program and regional offices' activities link the Agency's engagement with outside entities, including: Congress, state and local governments, nongovernmental organizations, national and community associations, and the public. These activities include management, coordination, and establishing policy.

Within this program, key functions include: responding to congressional requests for information; coordinating and providing outreach to state and local governments and rural communities; and supporting press and other communications activities. This program also supports administrative management services involving correspondence control and records management systems, human resources management, budget formulation and execution, and information technology management services.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the IO will continue providing management, leadership, and direction to all of EPA's programs and activities and develop the guidance necessary to ensure achievement of the Agency's core statutory responsibilities. In FY 2019, IO resources will primarily support critical needs for staff, including travel and workforce support.

OCIR serves as EPA's principal point of contact for Congress, regions, states, and local governments and as the coordination point for interaction with other agency offices and officials with these entities. OCIR is comprised of two main components: the Office of Congressional Affairs (OCA) and the Office of Intergovernmental Relations (OIR). Interactions with Congress

are managed out of the Office of Congressional Affairs, the staff of which is responsible for specific programmatic areas of the Agency. The Office of Intergovernmental Relations manages interactions with state and local governments and serves as the liaison for the Agency with national associations for state and local officials. In FY 2017, OCIR managed over 700 letters from members of Congress and governors, received over 140 Freedom of Information Act requests (FOIAs), and prepared senior leadership for several hearings including the confirmation of Administrator Pruitt.

In FY 2019, OCIR's OCA will prepare EPA officials for hearings, oversee responses to written inquiries and oversight requests from members of Congress, and coordinate and provide technical assistance and briefings on legislative areas of interest to members of Congress and their staff. OIR will continue to inform state and local governments of regulatory and other EPA activities. Additionally, OIR will lead the Agency's efforts to support productive working relationships with states through a renewed focus on cooperative federalism.

The Office of Public Affairs (OPA) facilitates the exchange of information between EPA and the public, media, Congress, and state and local governments; broadly communicates EPA's mission; assists in public awareness of environmental issues; and informs EPA employees of important issues that affect them. OPA generally responds to approximately 8.9 thousand media inquiries annually, oversees the production of more than 300 videos annually, and manages more than 500 thousand webpages on EPA's website. In FY 2019, OPA will continue to inform the media of agency initiatives and deliver timely, accurate information. The office will continue to update the Agency's internet site to provide stakeholders with transparent, accurate, and comprehensive information on EPA's activities and policies. OPA will continue using multimedia and new media tools to provide stakeholders with information. The office also will work with EPA's programs to improve employee communications and collaboration, update the Agency's intranet site, and use other tools to provide agency information to employees.

As the central administrative management component of the Administrator's Office (AO), the Office of Administrative and Executive Services (OAES) provides advice, tools, and assistance to the AO's programmatic operations. In FY 2019, OAES will continue to conduct the following activities: human resources management, budget and financial management, information technology and security, and audit management.

The Office of the Executive Secretariat (OEX) manages the AO's correspondence, records management, and FOIA activities. The OEX correspondence team processes correspondence for the Administrator and Deputy Administrator and reviews and prepares documents for their signature. The team also manages the Administrator's primary email account. Finally, OEX operates the Correspondence Management System, which provides paperless workflow, tracking, and records management capabilities to more than three thousand registered users agencywide. In FY 2019, the OEX will maintain critical administrative support to the Administrator, Deputy Administrator, senior agency officials, and staff in order to comply with the statutory and regulatory requirements under the Federal Records Act (FRA), FOIA, and related statutes and regulations. The OEX will continue in the development and acquisition of the next-generation correspondence tracking tool and will implement the system agencywide.

The Office of Public Engagement (OPE) in the Office of the Administrator advises the Administrator and senior staff on activities surrounding different stakeholder groups. Also, OPE generates and distributes outreach plans for most regulatory actions. Such plans often include: meeting regularly with stakeholder groups to communicate the Administration's agenda at EPA, providing advance notification communications to relevant stakeholder groups on upcoming regulatory actions, facilitating in-state visits by the Administrator and/or senior staff to collect regulatory feedback, communicating key dates to stakeholders pertaining to opportunities to comment on EPA rulemakings, and hosting conference calls on regulatory topics with impacted stakeholders.

**Performance Measure Targets:**

| **(ST1) Number of grant commitments achieved by states, tribes, and local communities.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | TBD |

| **(ST2) Number of alternative shared governance approaches to address state, tribal, and local community reviews.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | TBD |

Work related to the results of measure Number of grant commitments achieved by states, tribes, and local communities, is agencywide in scope. The lead office is Office of the Administrator.

Work related to the results of measure Number of alternative shared governance approaches to address state, tribal, and local community reviews, is agencywide in scope. The lead office is Office of the Administrator.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- ($3,626.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$10,593.0/ -73.8 FTE) This program change reflects EPA's efforts to focus on the core legal requirements, federal-only and national efforts, provide support to states in implementing environmental laws, and ease burden.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Environmental Research, Development, and Demonstration Authorization Act (ERDDAA).

**Small Business Ombudsman**
Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$2,102.2*** | ***$2,080.0*** | ***$1,965.0*** | ***-$115.0*** |
| Total Budget Authority | $2,102.2 | $2,080.0 | $1,965.0 | -$115.0 |
| Total Workyears | 4.7 | 4.9 | 4.6 | -0.3 |

**Program Project Description:**

EPA's Office of Small and Disadvantaged Business Utilization includes the Small Business Ombudsman program, the Small Business Contracting program, and the Disadvantaged Business Enterprise (DBE) program.

The Small Business Ombudsman program includes the Asbestos and Small Business Ombudsman (ASBO)[42], as well as the Small Business Advocacy Chair and other small business activities located in the Office of Policy's Office of Regulatory Policy and Management.[43] The program provides a comprehensive suite of resources, networks, tools, and forums for education and advocacy on behalf of small businesses and leads EPA's implementation of the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA).

The ASBO serves as the Agency's principal advocate for small business regulatory issues through its partnership with EPA Regional Small Business Liaisons, state Small Business Environmental Assistance Programs (SBEAPs)[44] nationwide, the U.S. Small Business Administration (SBA) Office of Advocacy, and hundreds of small business trade associations. These partnerships provide the information and perspective EPA needs to help small businesses achieve their environmental goals.

Overall, the core functions of the Small Business Ombudsman program include assisting EPA's program offices with analysis and consideration of the impact of their regulatory actions on small businesses; engaging small entity representatives, and other federal agencies in evaluating the potential impacts of rules; operating and supporting the program's hotline and homepage; and supporting internal and external small business activities. The program helps small businesses learn about new actions and developments within EPA and helps the Agency learn about the concerns and needs of small businesses.

[42] For more information, https://www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman.
[43] For more information, https://www.epa.gov/aboutepa/about-office-policy-op#ORPM.
[44] For more information, https://nationalsbeap.org/.

The Small Business Contracting program is mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). As prescribed under that section, the program provides expertise in ensuring small business prime and subcontract opportunities to expand the competitive supplier base in furthering the Agency's mission. The program offers statutorily required counselling to EPA's contracting community on all aspects of the acquisition cycle. It also affords statutorily mandated advocacy and technical assistance to the various categories of small businesses, including, disadvantaged businesses; certified small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses.

In accordance with the many statutory responsibilities required under Section 15(k), the Small Business Contracting program provides expertise in conducting market research for EPA acquisitions; works with acquisition officials to advise on the structure of procurements and to revise solicitations to maximize small business participation; and performs contract bundling reviews to ensure a pipeline of responsible small business suppliers to compete for the Agency's procurements. In addition, the program processes unsolicited proposals to help the Agency identify new and innovative ways to support the Agency's mission, and assists small businesses in resolving payment issues regarding contract performance. It further provides a broad range of training, outreach and technical assistance to small businesses seeking to do business with EPA.

The DBE program[45] provides national outreach, education, and assistance to increase the utilization of businesses owned and controlled by socially and economically disadvantaged individuals in procurements funded under EPA financial assistance agreements. The DBE Program implements the Clean Air Act Amendments of 1990, 42 U.S.C. § 7601, which establishes a 10 percent DBE goal for Clean Air Act research projects, and Public Law 102-389, 42 U.S. C § 4370d, which establishes an 8 percent DBE Goal for prime and subcontracts awarded in support of all other authorized programs. Under the program, OSDBU negotiates DBE goals with each financial assistance agreement recipient based on the availability of DBE certified firms. OSDBU closely monitors each recipient's procurement activities to confirm compliance with the Good Faith Effort requirements to meet the goals.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the programs will:

- Improve environmental protection by working with EPA program offices and state SBEAPs to share information and leverage resources, provide compliance assistance resources and enhance the compliance assistance tool box available to the small business community.

- The ASBO will continue to implement a new internal and external outreach program focused on increasing outreach platforms for more effective public engagement.

[45] For more information, www.epa.gov/resources-small-businesses/disadvantaged-business-enterprise-resources-and-training.

- Serve as the Agency's point of contact for the Small Business Paperwork Relief Act[46] by coordinating efforts with the Agency's program offices to further reduce the information collection burden for small businesses with fewer than 25 employees.

- Streamline the review process and analysis of forecasted and proposed EPA acquisitions above the simplified acquisition threshold to ensure the maximum practicable contracting opportunities for small business concerns, in accordance with Section 15 of the Small Business Act.

- Support EPA's efforts to expand regulatory consistency and certainty by strengthening the outreach and engagement efforts of the Agency's Small Business Advocacy Review Panel process performed under Section 609 of the Small Business Regulatory Enforcement Fairness Act. The engagement will ensure appropriate dissemination of relevant information and opportunity for public input to help build trust and create positive environmental outcomes.

Additionally, OSDBU is currently exploring options to transfer the DBE program to another office within EPA, in part as a result of a corrective action measure recommended in GAO Report, GAO-17-675, entitled: *Small Business Contracting: Actions Needed to Demonstrate and Better Review Compliance with Select Requirements for Small Business Advocates*.

**Performance Measure Targets:**

Currently, there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$126.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$11.0/ -0.3 FTE) With a limited change in resources, the Agency will prioritize activities to ensure compliance with its statutory obligations under the Small Business act. This net program change incorporates the statutory functions of the Small Minority Business Assistance program project, under the Office of Small and Disadvantaged Business Utilization into this program.

**Statutory Authority:**

Toxic Substances Control Act (TSCA); Clean Air Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.); 42 U.S.C. § 7661f; 15 U.S.C § 644(k); 42 U.S.C. § 4370d and 7601 note.

[46] For more information: https://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/sbpra-hr327.pdf.

**State and Local Prevention and Preparedness**
Program Area: Information Exchange / Outreach
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$14,413.1*** | ***$15,269.0*** | ***$10,031.0*** | ***-$5,238.0*** |
| Total Budget Authority | $14,413.1 | $15,269.0 | $10,031.0 | -$5,238.0 |
| Total Workyears | 68.5 | 74.2 | 46.9 | -27.3 |

**Program Project Description:**

The State and Local Prevention and Preparedness program establishes a structure composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, and property from chemical accident risks through advanced technologies, community and facility engagement, and improved safety systems. This framework provides the foundation for community emergency responders, facility hazard response planning, and reduction of risk posed from chemical facilities.

Under Section 112(r) of the 1990 Clean Air Act, chemical facilities that store more than a certain amount of listed extremely hazardous substances are required to implement a Risk Management Plan (RMP) program. These facilities, known as RMP facilities, take preventive measures, report data, mitigate and/or respond to chemical releases, and work with communities, response, and planning groups to increase understanding of risks.[47]

The Emergency Planning and Community Right –to-Know Act (EPCRA) of 1986 was created to help communities plan for chemical emergencies and to inform the public about chemicals in their community. Under EPCRA, facilities are required to report about the chemicals they produce, use, and store to federal, state, and local governments. States, tribes, and local governments use this information to prepare communities from potential releases from these facilities through the development of local emergency response plans.[48]

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination. In FY 2019, the State and Local Prevention and Preparedness program will perform the following activities:

- Inspect RMP and EPCRA facilities to ensure compliance with accident prevention and preparedness regulations, work with facilities to reduce chemical risks and improve

[47] For additional information, refer to: https://www.epa.gov/rmp.
[48] For additional information, refer to: https://www.epa.gov/epcra.

chemical facility safety. There are approximately 12,500 chemical facilities that are subject to the RMP regulations. Of these, approximately 1,900 facilities have been designated as high-risk based upon their accident history, quantity of on-site dangerous chemicals stored, and proximity to large residential populations. EPA prioritizes inspections at high-risk facilities.

- Provide basic and advanced RMP and EPCRA inspector training for federal and state inspectors.

- Maintain the national Central Data Exchange (CDX) RMP reporting center database, which is the nation's premier source of information on chemical process risks and contains hazard information on all RMP facilities. Industry electronically submits updated RMPs to this secure database.

- Develop limited updates to the Computer-Aided Management of Emergency Operations (CAMEO) software suite, *i.e.,* the CAMEO Chemicals application, which will provide free and publically available information for firefighting, first aid, and spill response activities.

- Complete reconsideration of the RMP Amendments final rule as a result of three petitions for reconsideration requested under the Clean Air Act. Reconsideration may result in further amendments to the final rule.

EPA is proposing to develop a new program that would authorize EPA to collect and use fees for compliance assistance. This fee and service will be voluntary and EPA would conduct an on-site walk through within one-year of the accepted request and provide a report to assist RMP facilities in complying with EPA regulations. Authorizing language is proposed with this budget submission.

**Performance Measure Targets:**

| **(CH2) Number of risk management plan inspections conducted.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 175 | 175 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$689.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5,927.0/ -27.3 FTE) This program change reduces resources for technical support and outreach, and eliminates grant support for certified RMP inspectors in FY 2019.

**Statutory Authority:**

The Emergency Planning and Community Right-to-Know Act (EPCRA); the Clean Air Act (CAA) § 112(r), as amended by the Chemical Safety Information, Site Security, and Fuels Regulatory Relief Act.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$12,556.8*** | ***$14,187.0*** | ***$7,726.0*** | ***-$6,461.0*** |
| Total Budget Authority | $12,556.8 | $14,187.0 | $7,726.0 | -$6,461.0 |
| Total Workyears | 37.7 | 43.5 | 20.8 | -22.7 |

**Program Project Description:**

EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting timely, high-quality, and relevant information. The Toxics Release Inventory (TRI) program[49] supports EPA's mission by annually publishing, for the public, release and other waste management (e.g., recycling) and pollution prevention data on over 650 toxic chemicals from approximately 20,000 industrial and federal facilities. The TRI Program is a premiere source of toxic chemical release data for communities, non-governmental organizations, industrial facilities, academia, and government agencies.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will focus on the collection of the chemical release data and making the data available to governments and the public.

EPA's Office of Environmental Information will continue to provide reporting facilities with an online reporting application, TRI-MEweb, to facilitate the electronic preparation and submission of TRI reports through EPA's Central Data Exchange (CDX). In addition, the TRI data collected by EPA are shared with states who have an active node on CDX and are partners of the TRI Data Exchange (TDX). EPA will continue to maintain the TDX used by states, tribes and territories. OEI also will continue to support the TRIPS database, which is the repository for TRI data. Maintaining the TRI data includes data quality activities and transmitting the data to the Envirofacts web portal in support of the public's access to TRI data.

In FY 2019, the TRI program will continue to conduct approximately 600 data quality checks to help ensure the accuracy and completeness of the reported data. The TRI program will continue to publish the annual TRI National Analysis, including describing relevant trends in toxic chemical releases and other waste management and innovative approaches by industry to reduce pollution. Since electronic systems that collect and disseminate TRI data have already been largely developed, operations and maintenance of TRI-MEweb, TRIPS, and its processes that contribute

[49] Please see: http://www.epa.gov/tri/.

to the annual TRI National Analysis will be reduced and streamlined while allowing the TRI program to continue to meet statutory requirements for industry reporting and public access to TRI data. This will be accomplished by leveraging the cloud environments and OEI enterprise infrastructure and services. This includes optimizing search and data transfers within EnviroFacts, the system that provides public access to the statutorily required data submitted by industry.

As required by the Emergency Planning and Community Right-to-Know Act (EPCRA), the Agency will respond to EPCRA petitions regarding TRI within 180 days after receipt. Petitions may request to add or delete chemicals or industry sectors on the TRI. The quantity and complexity of petitions are unknown until submitted to the Agency.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$459.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$4,384.0/ -19.7 FTE) This program change eliminates funding for the TRI National Training Conference, TRI University Challenge, TRI Tools (other than for operations and maintenance), and other TRI communication initiatives, and reflects planned streamlining of the TRI program as TRI information can increasingly be accessed remotely via databases and web tools. This program change also reflects a reduction in contractual costs for producing TRI annual reports as a result of the 2013 TRI Electronic Reporting Rule.

- (-$2,536.0/ -3.0 FTE) This program change reduces resources for operations and maintenance for the OEI TRI tools in EnviroFacts, Data Processing Center operations, Help Desk activities, and security upgrades. In addition, enhancements for TRI-MEweb and TRIPS are eliminated.

**Statutory Authority**:

Emergency Planning and Community Right-to-Know Act (EPCRA), § 313; Pollution Prevention Act of 1990 (PPA), § 6607.

**Tribal Capacity Building**
Program Area: Information Exchange / Outreach
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$14,760.7*** | ***$14,448.0*** | ***$12,631.0*** | ***-$1,817.0*** |
| Total Budget Authority | $14,760.7 | $14,448.0 | $12,631.0 | -$1,817.0 |
| Total Workyears | 86.3 | 87.9 | 72.0 | -15.9 |

**Program Project Description:**

Under federal environmental statutes, EPA has responsibility for protecting human health and the environment in Indian country. Under EPA's 1984 Indian Policy[50], the Agency works with federally recognized tribes (tribes) on a government-to-government basis in recognition of the federal government's trust responsibility to tribes to implement federal environmental programs. In the 1984 Indian Policy, the "EPA recognizes tribes as the primary parties for setting standards, making environmental policy decisions, and managing programs for reservations consistent with agency standards and regulations" and therefore, EPA assists tribes in developing the program to make such decisions. In the absence of a program delegation to a tribe, EPA directly implements the program.

EPA's American Indian Environmental program leads the agencywide efforts to ensure environmental protection in Indian country. Please see http://www.epa.gov/tribal for more information.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 – 2022 Strategic Plan. Overall, the Agency has made steady progress towards strengthening human health and environmental protection on tribal lands. The Agency will further its priority of strengthening tribal partnerships and continue to work toward its goal of building tribal capacity through a number of mechanisms in FY 2019. In addition, EPA continues the direct implementation assessment effort to better understand EPA's direct implementation responsibilities and activities on a program-by-program basis in Indian country.

**Capacity Building:** EPA will provide technical assistance to tribes developing and implementing federal environmental programs through several means, including the "treatment in a manner similar to a state" (TAS) process and the use of the Direct Implementation Tribal Cooperative Agreement (DITCA) authority. EPA will provide technical and financial assistance to ensure

[50] EPA Policy for the Administration of Environmental Programs on Indian Reservations available at http://www.epa.gov/tribalportal/pdf/indian-policy-84.pdf.

tribal governments have the opportunity to build the capacity to meaningfully participate and engage in environmental protection activities. To date, EPA has approved 110 TAS program delegations to tribes, including 12 with compliance and enforcement authority. EPA also has entered into 49 DITCAs, with 19 active DITCAs in FY 2017.

**Indian Environmental General Assistance Program (GAP) Capacity Building Support**: GAP grants to tribal governments help build the basic components of a tribal environmental program. The Agency manages GAP grants according to its "*Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia."*[51] In FY 2019, EPA will continue to implement this Guidance, planned to be modified in FY 2018, to build tribal capacity and address environmental issues in Indian country. EPA's work in FY 2019 also will continue to enhance EPA-Tribal partnerships supported by the framework for joint strategic planning set forth in the 2013 Guidance.

The Agency is continuing a process to establish a performance information management system to track the progress tribes achieve for developing and implementing environmental protection programs in Indian Country. This effort builds on the 2013 (GAP) Guidance,[52] which provides measurable tribal capacity indicators within a national capacity development framework. In FY 2019, EPA will work with regional and tribal early adopters of the system to define, select, complete, and report on indicators of capacity and other performance management information relevant to tribal environmental conditions and the operation of tribal environmental programs. Using an agile system development methodology, EPA will refine the system with early adopters prior to broader deployment. Establishing the performance information management system is an important component of EPA's efforts to track and measure tribal accomplishments through GAP.

**GAP Online:** In addition to the improved measurement scheme noted above, EPA will continue to use GAP Online, an internet-based database that assists tribes and EPA in developing, reviewing, and archiving GAP work plans and progress reports. EPA and tribes use the database to negotiate plans and track progress with individual grantees. GAP Online creates an easily accessible record to help mitigate challenges associated with relatively high rates of staff turnover in many tribal environmental departments.

**Tribal Consultation:** In working with the tribes, EPA follows its "*Policy on Consultation and Coordination Policy with Indian Tribes*[53]. The Consultation Policy builds on EPA's 1984 Indian Policy and establishes clear agency standards for a consultation process promoting consistency and coordination. In FY 2019, EPA will continue to support the Agency's web-based Tribal Consultation Opportunities Tracking System (TCOTS), a publically accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

[51] Please refer to: https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal for further information.
[52] Please refer to: http://www.epa.gov/tribalportal/GAP-guidance-final.pdf for further information.
[53] Please refer to: http://www.epa.gov/tribalportal/pdf/cons-and-coord-with-indian-tribes-policy.pdf for further information.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$229.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$2,046.0/ -15.9 FTE) This net program change includes an increase for the Tribal GAP performance management system, reductions in some tribal capacity building efforts, and eliminates: grants to tribal colleges and universities; certain tribal small-grant programs; contract support for assessing EPA's direct implementation responsibilities in Indian country; and contract and staff support.

**Statutory Authority:**

Annual Appropriation Acts; Indian Environmental General Assistance Program Act; PPA; FIFRA; CAA; TSCA; NEPA; CWA; SDWA; RCRA; CERCLA; NAFTA; MPRSA; Indoor Radon Abatement Act; OPA; and additional authorities.

Work within this Tribal Capacity Building Program supports the above authorities, as well as additional statutory authorities that influence environmental protection and affect human health and environmental protection in Indian country.

**Environmental Education**
Program Area: Information Exchange / Outreach
Goal: Cooperative Federalism
Objective(s): Increase Transparency and Public Participation

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$8,930.9*** | ***$8,643.0*** | ***$0.0*** | ***-$8,643.0*** |
| Total Budget Authority | $8,930.9 | $8,643.0 | $0.0 | -$8,643.0 |
| Total Workyears | 9.5 | 11.1 | 0.0 | -11.1 |

**Program Project Description:**

The Environmental Education (EE) program provides guidance and financial support to both rural and urban focused grassroots and nonprofit organizations, local educational institutions, universities, community colleges and state and local environmental agencies. Financial support from EE received by these entities is via the competitive grant process and cooperative agreements. EE also administers the Presidential Environmental Education Awards Program.

**FY 2019 Activities and Performance Plan:**

Resources have been proposed for elimination for this program in FY 2019. EPA will continue to find ways to streamline education activities and leverage funding outside the Agency for environmental stewardship activities via existing cooperative agreements and at the state and local level.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$8,643.0/ -11.1 FTE) This funding change proposes to eliminate the Environmental Education program.

**Statutory Authority:**

National Environmental Education Act (NEEA); Clean Air Act, § 103; Clean Water Act, § 104; Solid Waste Disposal Act (SWDA), § 8001; Safe Drinking Water Act (SDWA), § 1442; Toxic Substances Control Act (TSCA), § 10; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), § 20.

**Small Minority Business Assistance**

Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$1,704.6*** | ***$1,573.0*** | ***$0.0*** | ***-$1,573.0*** |
| Total Budget Authority | $1,704.6 | $1,573.0 | $0.0 | -$1,573.0 |
| Total Workyears | 8.1 | 8.9 | 0.0 | -8.9 |

**Program Project Description:**

EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) manages the Agency's Small Business Contracting and Disadvantaged Business Enterprise (DBE) programs.

The Small Business Contracting program is mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). The program provides expertise in expanding small business prime and subcontracting opportunities. The program offers counselling to EPA's contracting community on all aspects of the acquisition cycle. It also provides a range of advocacy, outreach and technical assistance to the various categories of small businesses, including, disadvantaged and women-owned small businesses; businesses located in Historically Underutilized Business Zones (HUBZone); and service-disabled veteran-owned small businesses (SDVOSBs).

The DBE program provides national outreach, education and assistance to increase the utilization of businesses owned and controlled by socially and economically disadvantaged individuals in procurements funded under EPA financial assistance agreements. Under the DBE program, OSDBU issues the governing program eligibility and compliance requirements.

**FY 2019 Activities and Performance Plan:**

Resources and FTE for this program have been proposed for elimination for this program in FY 2019. The Agency will integrate its resources for Small and Disadvantaged Business activities under the Small Business Ombudsman program.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,573.0/ -8.9 FTE) This funding change proposes to eliminate the Small Minority Business Assistance program as part of the effort to streamline functions that can be absorbed into other programs. Key portions of this program's activities will be shifted to the Small Business Ombudsman program.

**Statutory Authority:**

15 U.S.C § 644(k); 42 U.S.C. § 4370d; Clean Air Act Amendments of 1990, Public Law 101-549 (codified at 42 U.S.C. § 7601 note).

# International Programs

**International Sources of Pollution**
Program Area: International Programs
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$6,338.3*** | ***$6,506.0*** | ***$4,188.0*** | ***-$2,318.0*** |
| Total Budget Authority | $6,338.3 | $6,506.0 | $4,188.0 | -$2,318.0 |
| Total Workyears | 36.7 | 38.2 | 14.2 | -24.0 |

## Program Project Description:

To achieve our domestic environmental and human health objectives, the U.S. works with international partners to address international sources of pollution, as well as the impacts of pollution from the U.S. on other countries and the global environment. International sources of pollution impacts air, water, food crops and food chains, and can accumulate in foods such as fish. Achieving healthy environments, ecosystems, and communities provides the foundation for economic development, food security, and sustainable growth.

EPA's work with international partners and organizations is essential to successfully addressing transboundary pollution adversely impacting the U.S. Strengthening environmental protection abroad so that it is on par with practices in the U.S. helps build a level playing field for U.S. industry and promotes opportunities for U.S. technologies and innovation. EPA's international programs also play an important role in fulfilling national security and foreign policy objectives.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. Specifically, EPA will engage with key priority countries like China to address air pollution that contributes significant pollution to the domestic and international environment. For example, China is implementing national air quality monitoring, planning, and control strategies with advice and lessons learned from the U.S. Environmental policies adopted and implemented in China will improve competitiveness for U.S. businesses, drive demand for US emissions control technologies, and expand exports of U.S. environmental goods and services to China while improving air quality conditions in the United States.

EPA will maintain efforts to reduce environmental threats to U.S. citizens from global contaminants impacting air, water, and food safety. In particular, EPA will continue technical and policy assistance for global and regional efforts to address international sources of harmful

pollutants, such as mercury. Since 70 percent of the mercury deposited in the U.S. comes from global sources,[54] both domestic efforts and international cooperation are important to address mercury pollution. For example, EPA will continue to work with international partners and key countries to fully implement obligations under the Minamata Convention on Mercury in order to protect the U.S. population from mercury emissions originating in other countries from artisanal and small-scale gold mining. EPA also will continue its participation in the North American Commission for Environmental Cooperation (CEC) which provides regional and international leadership to advance environmental protection, human health and sustainable economic growth in North America.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$387.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$2,705.0/ -24.0 FTE) This program change reflects a reduction to support reprioritization of Agency activities. The program will focus efforts on highest priority international issues.

**Statutory Authority:**

In conjunction with the National Environmental Policy Act (NEPA), § 102(2)(F): Clean Air Act, § 103(a); Clean Water Act, § 104(a)(1)-(2); Safe Drinking Water Act (SDWA), §§ 1442(a)(1), 8001(a)(1); Federal Insecticide Fungicide and Rodenticide Act (FIFRA), §§ 17(d), 20(a); Toxic Substances Control Act (TSCA), §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA), § 203(a)(1); E.O. 13547; E.O. 13689.

[54] For more information, see: http://www.epa.gov/international/toxics/mercury/mnegotiations.html and www.mercuryconvention.org.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$5,857.8*** | ***$5,777.0*** | ***$0.0*** | ***-$5,777.0*** |
| Total Budget Authority | $5,857.8 | $5,777.0 | $0.0 | -$5,777.0 |
| Total Workyears | 17.5 | 18.0 | 0.0 | -18.0 |

**Program Project Description:**

EPA is a member of the Trade Policy Staff Committee (TPSC) and the Trade Policy Review Group (TPRG) - interagency mechanisms that provide advice, guidance, and clearance to the Office of the U.S. Trade Representative (USTR) in the development of U.S. international trade and investment policy. It is understood that trade influences the nature and scope of economic activity and therefore the levels of pollutant emissions and natural resource use. EPA's role in trade negotiations is to ensure that agreements have strong environmental provisions that are consistent with the Administration's goal to protect the environment while not putting the U.S. at an economic disadvantage.

**FY 2019 Activities and Performance Plan:**

Resources and FTE are proposed for elimination in FY 2019.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$5,777.0/ -18.0 FTE) This program change eliminates the Trade and Governance program.

**Statutory Authority:**

In conjunction with the National Environmental Policy Act (NEPA), § 102(2)(F): Clean Air Act, § 103(a); Clean Water Act, § 104(a)(1) -(2); Safe Drinking Water Act (SDWA), §§ 1442(a)(1), 8001(a)(1); Federal Insecticide Fungicide and Rodenticide Act (FIFRA), §§ 17(d), 20(a); Toxic Substances Control Act (TSCA), §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA), § 203(a)(1); E.O. 12915; E.O. 13141; E.O. 13277, as amended by E.O. 13346.

**US Mexico Border**

Program Area: International Programs
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$2,864.8*** | ***$3,012.0*** | ***$0.0*** | ***-$3,012.0*** |
| Total Budget Authority | $2,864.8 | $3,012.0 | $0.0 | -$3,012.0 |
| Total Workyears | 13.7 | 14.7 | 0.0 | -14.7 |

**Program Project Description:**

The two thousand-mile border between the United States and Mexico is one of the most complex and dynamic regions in the world, where the benefits of international programs are perhaps most apparent. This region accounts for three of the ten poorest counties in the U.S., with an unemployment rate 250-300 percent higher than the rest of the United States.[55] In addition, over 430 thousand of the 14 million people in the region live in 1,200 colonias,[56] which are unincorporated communities characterized by substandard housing and unsafe drinking water. The 1983 La Paz Agreement[57] and the adoption of the Border Programs have gone a long way to protect and improve the health and environmental conditions along a border that extends from the Gulf of Mexico to the Pacific Ocean.

**FY 2019 Activities and Performance Plan:**

Resources and FTE are proposed for elimination in FY 2019.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$3,012.0/ -14.7 FTE) This program change eliminates the U.S. Mexico Border Program. Projects historically funded along the two thousand mile border between the United States and Mexico may be eligible for funding under the Clean Water and Drinking Water State Revolving Funds.

[55] http://hsc.unm.edu/community/toolkit/docs2/10.USMBHC-TheBorderAtAGlance.pdf
[56] http://hsc.unm.edu/community/toolkit/docs2/10.USMBHC-TheBorderAtAGlance.pdf
[57] https://www.epa.gov/sites/production/files/2015-09/documents/lapazagreement.pdf

**Statutory Authority:**

In conjunction with the National Environmental Policy Act (NEPA), § 102(2)(F): Clean Air Act, § 103(a); Clean Water Act, § 104(a)(1) -(2); Safe Drinking Water Act (SDWA), §§ 1442(a)(1), 8001(a)(1); Federal Insecticide Fungicide and Rodenticide Act (FIFRA), §§ 17(d), 20(a); Toxic Substances Control Act (TSCA), §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA), § 203(a)(1).

## IT/ Data Management/ Security

**Information Security**
Program Area: IT / Data Management / Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$9,166.5*** | ***$6,742.0*** | ***$13,755.0*** | ***$7,013.0*** |
| Hazardous Substance Superfund | $654.9 | $666.0 | $5,186.0 | $4,520.0 |
| Total Budget Authority | $9,821.4 | $7,408.0 | $18,941.0 | $11,533.0 |
| Total Workyears | 21.6 | 14.3 | 12.8 | -1.5 |

**Program Project Description:**

Information is a valuable national resource and a strategic asset to EPA. It enables the Agency to fulfill its mission to protect human health and the environment. The Agency's Information Security program is designed to protect the confidentiality, availability and integrity of EPA's information assets. The information protection strategy includes, but is not limited to:

- Policy, procedure and practice management;
- Information security awareness, training and education;
- Risk-based governance and oversight;
- Weakness remediation;
- Operational security management;
- Incident response and handling; and
- Federal Information Security Modernization Act (FISMA) compliance and reporting.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. Cybersecurity is a serious challenge to our nation's security and economic prosperity. EPA will maintain continuous monitoring of security controls in FY 2019. Effective information security requires vigilance and the ability to adapt to new challenges every day. EPA will continue to manage information security risk and build upon efforts to protect, defend and look to improve information security business processes to improve efficiency and effectiveness.

In FY 2019, EPA will sustain some existing improvements. EPA expects to leverage the Continuous Diagnostics and Mitigation (CDM) program to close existing gaps by improving audit capabilities, ensuring accountability and adding protections directly associated with the

information. The requested funding is essential to maintain the mandated CDM capabilities. To realize these improvements, the Agency will need to sustain the tools and processes implemented to date. The security architecture, associated processes, and expert personnel comprise an ecosystem with cross dependencies, and the system is strongest when operating as a whole.

The CDM program, centrally managed by the Department of Homeland Security, provides tools that will give near real-time awareness of EPA's networks and environments. CDM consists of four implementation phases with an estimated cost of over $10 million in FY 2019 across all appropriations once all capabilities are in place. Data from the individual agency dashboards across the federal government will be aggregated into one federal-level dashboard maintained by the CDM program, which allows DHS to monitor and respond to federal cybersecurity threats and incidents much more quickly and efficiently. The Agency will continue to work with DHS to implement future phases based on capacity. Costs of operating and maintaining CDM capabilities are anticipated to increase significantly in FY 2019 as more capabilities come online. The Agency will prioritize security capabilities based on an evaluation of evolving threats.

The Information Security program also will continue to detect and remediate the effects of Advanced Persistent Threats to the Agency's information and information systems. The Agency will continue to focus on training and user-awareness to foster desired behavior, asset definition and management, compliance, incident management, knowledge and information management, risk management and technology management. These efforts will strengthen the Agency's ability to adequately protect information assets. The final result will be an information security program that can rely on effective and efficient controls and processes to counter cybersecurity threats.

EPA will look to refine its Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting and reporting of suspicious activity. CSIRC's mission is to protect EPA's information assets and respond to security incidents – actual and potential. This includes detecting unauthorized attempts to access, destroy, or alter EPA's data and information resources. CSIRC will maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission. The incident response capability includes components such as detection and analysis; forensics; and containment and eradication activities.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$172.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE.

- (+$5,185.0) This change to fixed and other costs is an increase needed for mandatory cyber security requirements[58], including CDM. Funding will be used to close existing gaps by improving audit capabilities, ensuring accountability and adding protections directly

[58] Including those found in Federal Information Security Modernization Act of 2014, and Federal Information Security Cybersecurity Act of 2015.

associated with the information. This change also supports CDM phase three which will continue implementation in FY 2019.

- (+$2,273.0) This program change reflects an increase in funding needed to continue operations and maintenance previously provided by DHS for mandatory protections implemented in CDM phase one and two focusing on endpoint integrity, least privilege and infrastructure integrity.

- (-$273.0/ -1.5 FTE) This program change reflects a reduction in the startup cybersecurity related improvement activities funded in FY 2016.

**Statutory Authority:**

Federal Information Security Cybersecurity Act of 2015; Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); the Privacy Act of 1974; Freedom of Information Act (FOIA)Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); the Privacy Act of 1974; Freedom of Information Act (FOIA).

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$82,580.0*** | ***$83,179.0*** | ***$69,264.0*** | ***-$13,915.0*** |
| Science & Technology | $3,342.0 | $3,068.0 | $2,725.0 | -$343.0 |
| Hazardous Substance Superfund | $14,691.5 | $13,720.0 | $13,720.0 | $0.0 |
| Total Budget Authority | $100,613.5 | $99,967.0 | $85,709.0 | -$14,258.0 |
| Total Workyears | 441.0 | 498.3 | 457.9 | -40.4 |

## Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) program supports human health and environmental protection by providing critical IT infrastructure and data management needed for:

1) Access to scientific, regulatory, policy, and guidance information needed by the Agency, the regulated community, and the public;
2) Analytical support for interpreting and understanding environmental information;
3) Exchange and storage of data, analysis, and computation; and
4) Rapid, secure, and efficient communication.

These areas are then organized into the following functional areas: information analysis and access; data management and collection; information technology and infrastructure; and geospatial information and analysis. This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to get the information they need on demand, to understand what it means, and to submit and share environmental data with the least cost and burden. The program also provides support to other agency IT development projects and essential technology to agency staff, enabling them to conduct their work effectively and efficiently. In the context of the Federal Information Technology Acquisition Reform Act (FITARA), EPA is bringing its IT acquisition, portfolio review, and governance processes together to adopt practices that improve delivery of capability to users, drive down lifecycle costs, and leverage shared services.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. EPA has progressively integrated new and transformative approaches to the way IT is managed across the Agency. The goal of EPA's IT/DM services is to enhance the power of information by delivering on demand data to the right people

at the right time. In FY 2019, the program will strive to meet EPA's IT/IM service need while continuously improving customer experiences to allow EPA, its partners, and the public to acquire, generate, manage, use, and share information as a critical resource to protect human health and the environment. To accomplish this, the program will focus available capacity on the following areas:

- Improve the way EPA supports and manages the lifecycle of information and information products;
- Modernize EPA's IT/IM infrastructure, applications and services;
- Empower a mobile workforce using innovative and agile solutions; and
- Empower state and tribal partnerships using innovative and agile solutions.

In FY 2019, EPA will continue to implement the E-Enterprise business strategy, a transformative 21st century strategy – jointly governed by states, tribes, and EPA - for modernizing government agencies' delivery of services to support the protection of human health and the environment. EPA is building on progress made using E-Enterprise for the Environment, a platform for transformative change that operationalizes cooperative federalism principles. EPA's E-Enterprise partnership with states and tribes modernizes the way we do the business of environmental protection. IT/DM activities will continue to facilitate shared services and electronic transactions with the regulated community and external partners who routinely conduct environmental business with EPA. The Agency will use E-Enterprise to deliver streamlined processes as well as accessible, reliable information and data that benefit co-regulators and the regulated community.

In FY 2019, EPA will continue to implement its IT acquisition review process as part of the implementation of federal Common Baseline Controls for FITARA. In addition, FITARA controls include an established solid communication and engagement strategy for the CIO with the Agency's programs and regional offices to ensure that their IT plans are well designed, directly drive agency strategic objectives, and follow best practices. Lastly, the controls ensure the CIO engages closely with key IT decision-makers across EPA and fosters plans to refresh IT skills within the Agency.

In FY 2019, the following IT/DM activities will continue:

- **Data Management and Collection**: Data Management and Collection efforts include support for a variety of essential information management. For example, the National Records Management Program provides the framework within which program/regional records activities are conducted. These national activities include providing regulations, policies/procedures, coordination, and support to help fulfill EPA's statutory obligations to maintain records. Records management activities will be prioritized to align with available resources. Additionally, Discovery Services technology will continue to support the search/collection of agency information needed to help respond to requests for information from external stakeholders. EPA staff manage the agency's docket center and information collection requests, as required by the Paperwork Reduction Act. Since October 2002, EPA has served as the managing partner of the interagency shared service e-Rulemaking Program; however, in FY 2019 EPA will work with the Office of Management and Budget and the National Archives and Records Administration (NARA) towards transferring management services to the NARA/Office of the Federal Register.

- **Digital Services:** The FY 2019 budget includes funding to continue modest transformation of the Agency's digital services to make them more cost-effective for the agency to build and maintain. This includes some support to develop cloud computing approaches for the agency.

- **Geospatial:** In addition to meeting ongoing program needs, Geospatial information and analysis play a critical role in the Agency's ability to respond rapidly and effectively in times of emergency. In FY 2019, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications and services, the Agency is able to integrate and interpret multiple data sets and information sources to support environmental decisions. During FY 2019, the Agency will continue to focus on Geoplatform data services, dashboards, and story boards based on provided geographic information to support programmatic analysis and decision making. It also will better inform the public about EPA's use of grant funding to protect the environment and public health. In FY 2019, EPA also will provide support to the Geoplatform to publish internal and public mapping tools and make available a number of shareable maps, geodata services, and applications. EPA will continue to play a role in both the Federal Geographic Data Committee and the National Geospatial Platform, working with partner agencies to share geospatial technology capabilities across government.

- **Information Access and Analysis**: In FY 2019, EPA will focus on providing core support to agency infrastructure and utilizing tools that will harness the power of data across the Agency to drive better environmental decision making. The Agency will pause efforts to replace the data management functionality in the legacy EnviroFacts data warehouse. EPA will provide partnership support to other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze and visualize data.

  In addition, the program will provide support for maintenance of E-Enterprise capabilities and provide analysis of environmental information to the public and EPA's staff. The program will continue to ensure compliance of EPA's public systems with Section 508 of the Rehabilitation Act of 1973.

- **Information Technology and Infrastructure**: In FY 2019, the Agency will continue to maintain essential information technology and infrastructure. The Agency will adjust the schedule for replacement or upgrades to align with resources. EPA will continue to maintain and provision: desktop computing equipment, network connectivity, e-mail and collaboration tools, application hosting, remote access, telephone services, web and network services, and other IT-related equipment. In FY 2019, the Agency will continue efforts to consolidate EPA's data centers and computer rooms and to optimize operations within EPA's remaining data centers.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,336.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs.

- (-$12,579.0/ -44.8 FTE) This program change reflects a reduction to enterprise IT systems/tools and emergency response including shared services for Facility Registries, Geographic Information System platform support for emergency response and reduced support for regional libraries. It also modifies the timeline for development of new technologies such as new assistive technology tools, ability to re-platform legacy applications, and replace end of service IT equipment that provides basic workforce support across the agency.

**Statutory Authority:**

Modernizing Government Technology (MGT) Act, Federal Information Security Management Act; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Food Quality Protection Act (FQPA); Safe Drinking Water Act (SDWA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); Freedom of Information Act (FOIA); Controlled Substances Act (CSA).

**Legal/ Science/ Regulatory/ Economic Review**

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$4,533.9*** | ***$4,381.0*** | ***$4,557.0*** | ***$176.0*** |
| Total Budget Authority | $4,533.9 | $4,381.0 | $4,557.0 | $176.0 |
| Total Workyears | 24.4 | 25.8 | 23.8 | -2.0 |

**Program Project Description:**

This program supports EPA's Administrative Law Judges (ALJ) and the Environmental Appeals Board (EAB). By adjudicating disputed matters, the ALJ furthers the Agency's mission to protecting human health and the environment. The ALJ preside in hearings and issue initial decisions in cases initiated by EPA's enforcement program concerning environmental, civil rights, and government program fraud related violations. The Fifth Amendment of the Constitution of the United States of America guarantees the regulated community the right to due process of the law.

The ALJ provides the constitutionally guaranteed legal process and review for hearings and issues initial decisions in cases brought by the Agency's enforcement program against those accused of violations under various environmental, civil rights, and anti-fraud statutes. The right of affected persons to appeal those decisions is conferred by various statutes, regulations, and constitutional due process rights. The ALJ also offers an opportunity for alternative dispute resolution.

The EAB is a four-member appellate tribunal established by regulation in 1992 to hear appeals and issue final decisions in environmental adjudications (primarily enforcement and permit-related) under all major environmental statutes that EPA administers. The EAB promotes the rule of law and furthers the Agency's mission to protecting human health and the environment. The EAB decides petitions for reimbursement under CERCLA 106(b), hears appeals of pesticide licensing and cancellation proceedings under FIFRA, and serves as the final approving body for proposed settlements of enforcement actions initiated at EPA headquarters. The EAB issues decisions consistent with the APA and under the authority delegated by the Administrator and pursuant to regulation.

The EAB adjudicates administrative appeals in a fair and timely manner in accord with the APA, ensuring consistency in the application of legal requirements. The EAB also resolves disputes efficiently, avoiding protracted federal court review. In over ninety percent of matters decided by the EAB, no further appeal is taken to federal court, providing a final resolution to the dispute. The EAB also offers an opportunity for alternative dispute resolution.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/ Objective 3.1, Compliance with the Law in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the ALJ will convene formal hearings in the location of the alleged violator or violation, as required by statute. In FY 2019, the ALJ will continue to modernize its electronic filing and case management system to reduce mailing delays and costs. In FY 2019, the EAB will continue to implement its streamlined procedures for adjudicating permit appeals under all statutes, and will continue to expedite appeals in Clean Air Act New Source Review cases and in FIFRA licensing proceedings.

**Performance Measure Targets**:

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$650.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$474.0/ -2.0 FTE) This change is a reduction of funds for managing an electronic filing and case docketing system and for travel.

**Statutory Authority:**

Administrative Procedure Act (APA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Clean Water Act (CWA); Clean Air Act (CAA); Toxic Substance Control Act (TSCA); Solid Waste Disposal Act (SWDA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Emergency Planning and Community Right-to-Know Act (EPCRA); Marine Protection, Research, and Sanctuaries Act (MPRSA); Mercury-Containing and Rechargeable Battery Management Act (MCRBMA); the Act to Prevent Pollution From Ships (APPS).

**Civil Rights Program**

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$10,101.9*** | ***$9,699.0*** | ***$8,545.0*** | ***-$1,154.0*** |
| Total Budget Authority | $10,101.9 | $9,699.0 | $8,545.0 | -$1,154.0 |
| Total Workyears | 53.8 | 64.0 | 48.3 | -15.7 |

**Program Project Description:**

The Civil Rights program enforces federal civil rights laws that prohibit discrimination by recipients of federal financial assistance from EPA and also enforces federal civil rights laws that promote equal employment opportunity and protect employees and applicants for employment from discrimination. In addition, the program provides policy guidance and technical assistance to external recipients and also internally on Equal Employment Opportunity (EEO) and is responsible for carrying out the following functions:

- External Civil Rights Compliance (Title VI) functions include the enforcement of several civil rights laws, including Title VI of the Civil Rights Act of 1964, that prohibit discrimination on the basis of race, color, national origin (including limited-English proficiency), disability, sex, and age, in programs or activities that receive federal financial assistance from EPA. The Agency investigates and resolves external complaints, develops policy, conducts compliance reviews, and provides technical assistance to recipients.

- Employment Complaints Resolution (Title VII) functions address complaints of employment discrimination, including those filed under Title VII of the Civil Rights Act of 1964 and pursuant to Executive Order 13672 (July 21, 2014), alleging discrimination based on race; color; religion; sex, including pregnancy, sex stereotyping, gender identity or gender expression; national origin; sexual orientation; physical or mental disability; age; protected genetic information; status as a parent; marital status; political affiliation; or retaliation based on previous EEO activity, against EPA employees and applicants for EPA employment.

- Affirmative Employment Analysis and Accountability (AEAA) functions provide leadership, direction, and advice to managers and supervisors to assist them in carrying out equal opportunity and civil rights responsibilities. In addition, the Civil Rights program oversees EPA's continuing affirmative activities to promote EEO. The program also is responsible for reporting under the EEO Commission's Management Directive 715 (MD-

715),[59] which provides guidelines for identifying triggers and conducting barrier analysis within EPA's workforce.

- Reasonable Accommodation functions carry out EPA's responsibilities under the Rehabilitation Act of 1973, which requires the Agency to provide reasonable accommodation for individuals with disabilities, unless it would cause undue hardship for the Agency.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. The Civil Rights program is developing strategic plans for each of the functions, including specific goals, implementation steps, and benchmarks that will serve as internal performance measures to ensure accountability for all of the functions. In FY 2019, EPA will continue the strategic planning process with an emphasis on process improvement, internal performance measures, technology resources, and strategic human capital planning. These actions are consistent with measures called for in the EPA Report "Developing a Model Civil Rights Program at the EPA."[60]

**External Civil Rights, Including Title VI**

In FY 2019, the program will continue to implement the External Compliance Program Strategic Plan for FY 2015-2020 and support complaint docket management through investigations, informal resolution agreements and mediation. Providing proactive reviews and technical assistance to recipients, strategic policy development, and the program's workforce planning and training will be prioritized. Specific initiatives may continue as resources are available, including:

- Deployment of a collaborative "State Empowerment Initiative" that would help enhance effective civil rights programs related to environmental efforts at the state level; and

- Implementation of the program's Functional Competency Framework which strengthens the Agency's workforce by promoting the development of a highly effective, performance-based organization.

**Title VII**

In FY 2019, EPA will continue to prioritize its resources for the EEO programs by dedicating most of its financial resources to the processing of discrimination complaints, including EEO counseling, investigations, and drafting final Agency decisions. The program will focus on process improvements to: 1) ensure prompt, effective, and efficient EEO complaint docket management; 2) enhance the proactive EEO compliance program through strategic policy and training development, and the engagement of critical internal EPA partners; and 3) strengthen the Title VII workforce through strategic human capital planning, training, and the use of organizational

[59] Equal Employment Opportunity Commission, *Equal Employment Opportunity Management Directive 715, October 1, 2013.*
[60] For more information: http://intranet.epa.gov/civilrights/pdfs/training/ecfr-developing-a-model-civil-rights-program.pdf.

development and technology resources to promote a forward looking organization. In addition, the program will:

- Continue to train additional collateral-duty EEO Counselors by providing them with at least 32 hours of mediation training and by training the available workforce. The EEO Counselor is a mandatory function under federal regulations.

- Continue to execute timely investigations by identifying methods to further reduce, by an additional 10 percent from the prior year's performance, the number of days that complaints are under investigation to less than the regulatory 180 days.

- Continue to identify methods to reduce the number of days needed to issue final Agency decisions to ensure compliance with the 60-day regulatory timeframe. In FY 2017, the Office of Civil Rights improved regulatory compliance, and issued 32 decisions, which is nearly three times the number issued in the prior two fiscal years. By December 22, 2017 with the assistance of Agency volunteers from program and regional offices, the Office of Civil Rights had resolved 82 percent of the backlog of overdue decisions.

- Improve efficiency and effectiveness of the EEO process by identifying and revising EEO complaint and other Agency forms. The Office of Civil Rights initiated and continues to implement a Lean process to improve critical phases of the overall EEO process.

**Affirmative Employment Analysis and Accountability (AEAA)**

In FY 2019, the program will continue to focus on process improvement to: 1) ensure prompt, effective, and efficient development of critical and required reports, such as MD-715; 2) enhance the proactive Affirmative Employment function through development of strategic policy, and, training and the engagement of critical internal EPA partners; and 3) strengthen the AEAA workforce through strategic human capital planning, training, and the use of organizational development and technology resources to promote a forward looking organization. Consistent with this strategic approach, the program will continue to:

- Increase collaboration among program offices to ensure coordination of related EEO and diversity and inclusion missions.

- Ensure integration of civil rights into EPA's strategic planning processes, organizational assessments, operating plans, and other relevant reporting vehicles.

- Develop and implement activities, trainings, and educational events that assist EPA's programs in these relevant areas.

- Develop a process for conducting periodic surveys/focus groups in collaboration with EPA partners and through the Equal Employment Opportunity Officers, Program Management Officers, and Deputy Civil Rights Officials to collect information on best practices to ensure effective affirmative employment programs.

- Provide effective support tools for managers and supervisors in carrying out their responsibilities under MD-715 and the Diversity and Inclusion Strategic Plan.

- Ensure EPA-wide implementation of a critical activities and document management system for AEAA.

**Reasonable Accommodations (RA) Program**

In FY 2019, the RA program will continue to focus on process and technology improvements to ensure prompt, effective, and efficient RA request docket management. The program also will enhance the proactive RA compliance function through development of strategic policy; training and the engagement of critical internal EPA partners; and strengthen the RA program's workforce through strategic human capital planning, training, and the use of organizational development and technology resources to promote a forward looking organization. The program will continue to:

- Update and enhance the comprehensive, user-friendly electronic case, activity, and document management system.

- Update reasonable accommodation processes and templates to improve the timeliness, efficiency, and consistency of communications and to avoid release of sensitive personally identifiable information.

- Assess, evaluate, and further develop the online training curriculum for reasonable accommodation and Section 508 compliance.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,140.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$2,294.0/ -15.7 FTE) This program change reflects a reduction in the Civil Rights program through the streamlining of support for the processing of investigations for Title VI and Title VII complaints, enhancement of mandatory reporting, and improvements in the overall management of complaints and reporting processes.

**Statutory Authority:**

Title VI of the Civil Rights Act of 1964; Title IX of the Educational Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, and Section 13 of the Federal Water Act of the Federal Water Pollution Control Act of 1972; Title VII of the Civil Rights Act of 1964; Equal Pay Act of 1963; Rehabilitation Act of 1973, §§ 501, 504, 505, 508; Americans with Disabilities Act of 1990; ADA Amendments Act of 2008; Age Discrimination in Employment Act (ADEA) of 1967; Genetic Information Nondiscrimination Act (GINA).

**Integrated Environmental Strategies**
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$10,732.3*** | ***$10,581.0*** | ***$9,496.0*** | ***-$1,085.0*** |
| Total Budget Authority | $10,732.3 | $10,581.0 | $9,496.0 | -$1,085.0 |
| Total Workyears | 49.4 | 55.8 | 46.0 | -9.8 |

**Program Project Description:**

The Integrated Environmental Strategies (IES) program advances the Agency's mission while promoting economic growth from the national level to the community level and providing tools and resources to transform EPA into a more effective organization. Nationally, IES is focused on 1) streamlining EPA's permitting processes and 2) using business process improvement approaches more broadly. The intent is to increase EPA's efficiency and reduce unnecessary burden on states and the regulated community. IES also collaborates with federal, state, and municipal partners, communities, businesses, and other stakeholders to implement locally-led, community-driven approaches to environmental protection through technical assistance, policy analysis, and training.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in EPA's FY 2018 - 2022 Strategic Plan. This program demonstrates new approaches to streamline and reduce unnecessary burdens and to help communities meet their environmental and economic needs. In FY 2019, the program will focus on permit streamlining, sector strategies, Lean, and community-driven environmental protection.

*Permit Streamlining*
One way EPA implements its statutory authority is through various permitting programs. These programs are based on a set of processes that vary across EPA program and regional offices. This program focuses on streamlining EPA's permitting processes in support of the President's Memorandum "Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing" and Executive Orders 13771, "Reducing Regulation and Controlling Regulatory Costs" and Executive Order 13777, "Enforcing the Regulatory Reform Agenda."[61] In FY 2019, EPA also will strengthen its partnership with state permitting offices to streamline our review of state-issued permits.

[61] For more information: https://www.whitehouse.gov/presidential-actions/presidential-executive-order-reducing-regulation-controlling-regulatory-costs/.

*Smart Sectors*

In October 2017, EPA reinstituted a successful initiative to address information gaps between the Agency and regulated entities in the largest sectors of our economy. This program will receive input from industry associations, as well as individual businesses, to better inform the Agency's policy work, especially with respect to regulatory reform and our own internal business processes. In FY 2019, EPA will continue this effort to identify collaborative and innovative solutions to environmental problems. This will lead to better-informed rulemakings, reduced unnecessary burden on the regulated community, and increased transparency about environmental performance.

*Lean*

EPA continually seeks to improve the quality, transparency, and speed of its business processes. During the last several years, EPA has conducted more than 250 Lean projects across the Agency to achieve this goal, reducing process times by about 50 percent on average. For example, an effort to streamline cleanup decisions under the Resource Conservation and Recovery Act succeeded in cutting investigation times by at least five years. In FY 2019, this program will continue to support the use of Lean tools across the Agency by providing access to process improvement experts, identifying projects of high strategic value, measuring process improvements (e.g., time savings and satisfaction rates), and expanding the transfer of successful approaches across EPA programs and organizations. EPA also will continue implementation of an agencywide Lean management system to institutionalize the benefits Lean can provide.

*Community-Driven Environmental Protection*

This program delivers technical assistance, training, and tools to economically distressed communities and coordinates the Agency's work with communities to increase efficiency, effectiveness, and accountability. In FY 2019, the IES program will continue to lead the existing Cross-Agency Communities team, with particular focus on the new Administration's priorities, such as leveraging private investment and aligning federal investments to maximize benefits to communities.

Technical assistance and training is the cornerstone of EPA's cooperative approach to addressing environmental challenges in communities, particularly communities that are economically distressed. The objective is to help tribal, state, and local governments increase their capacity to protect the environment while growing their economies, creating jobs, using public and private sector investments, and other resources more efficiently. Where appropriate, EPA will partner with other agencies to help achieve locally-led, community-driven approaches to protecting clean air, land, and water, while at the same time supporting economic revitalization.

The program will continue analyses on emerging trends, innovative practices, and tools that support clean air, land, and water outcomes. EPA will develop tools to help interested communities incorporate innovative approaches to infrastructure and land development policies that deliver multiple economic, community, and quality of life benefits while also managing stormwater, reducing combined sewer overflows, improving local air quality, facilitating private investment in Brownfield and Superfund site redevelopment, and achieving other environmental benefits.

## Performance Measure Targets:

| (PE1) Percentage of permitting-related decisions issued within 6 months. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | No Target Established | TBD |

| (OP1) Number of operational processes improved. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 25 | 50 |

| (AD4) Cumulative number of state, tribal, and community partners that have integrated data, models, information, and other decision-support tools developed by EPA for climate resiliency into their planning processes. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 150 | 200 |

| (AD5) Cumulative number of state, tribal, and community partners that have incorporated climate resiliency into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 150 | 200 |

Work related to the results of measure Percentage of permitting-related decisions issued within 6 months, is agencywide in scope. The lead office is the Office of the Administrator.

## FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+$1,198.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefit costs.

- (-$2,283.0/ -9.8 FTE) This program change reflects a reduction in the Integrated Environmental Strategies program through streamlining of the community work and climate adaptation efforts within the IES program.

## Statutory Authority:

Clean Water Act (CWA), § 104(b)(3); Clean Air Act (CAA), § 103; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

## Legal Advice: Environmental Program

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$52,889.7*** | ***$49,657.0*** | ***$42,292.0*** | ***-$7,365.0*** |
| Hazardous Substance Superfund | $691.2 | $577.0 | $577.0 | $0.0 |
| Total Budget Authority | $53,580.9 | $50,234.0 | $42,869.0 | -$7,365.0 |
| Total Workyears | 277.4 | 274.6 | 221.8 | -52.8 |

### Program Project Description:

This program provides legal representational services, legal counseling and legal support for all of the Agency's environmental activities.[62] The legal support provided by this program is essential to the Agency's core mission. The personnel assigned to this program represent essential expertise in these critical fields that the Agency relies on for all of its decisions and activities in furtherance of its mission: to protect human health and the environment.

This program provides counsel on every major action the Agency takes. It plays a central role in all statutory and regulatory interpretation of new and existing rules and all rule and guidance development under EPA's environmental authorities. This program provides essential legal advice for every petition response, every judicial response and every emergency response. When the Agency acts to protect the public from pollutants or health-threatening chemicals in the air we breathe, in the water we drink, or in the food we eat, this program provides counsel on the Agency's authority to take that action; it then provides the advice and support necessary to finalize and implement that action. When that action is challenged in court, this program defends it.

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in EPA's FY 2018 - 2022 Strategic Plan. This program provides legal representation in approximately 350 defensive judicial cases each year. It is projected that the number of cases in FY 2019 will exceed this number. The program will continue to provide legal representation in judicial and administrative litigation for core agency environmental programs and for agency priorities. The program also will provide counseling outside of the litigation context in the highest priority issues arising under all the legal environmental statutes administered by EPA.

[62] Resources for legal services for Support programs are included in the Legal Advice: Support program.

In FY 2019, the Agency will continue to focus on its core mission to apply the most effective approaches by implementing EPA's environmental programs under the Resource Conservation and Recovery Act (RCRA), Leaking Underground Storage Tanks (LUST), Clean Air Act (CAA), Clean Water Act (CWA), Toxic Substances Control Act (TSCA), Federal Insecticide Fungicide and Rodenticide Act (FIFRA), Food Quality Protection Act (FQPA), Safe Drinking Water Act (SDWA), and other authorities. This strategy will help ensure that human health and the environment are protected and provided with clean air, water, and land, and safe chemicals and pesticides in the most effective way.

Legal counseling resources also continue to be in high demand to support the Agency's response to states seeking assistance developing or implementing environmental programs, industrial facilities seeking permits that are required to undertake new economic activity, and citizens seeking actions to protect local environmental quality, among other things. The program will prioritize resources after supporting judicial and administrative litigation to counseling agency clients on these matters.

The following examples illustrate this program's important role in implementing the Agency's core mission:

- Played a substantial role in the promulgation of three TSCA final rules, a significant guidance document, and the scoping documents for the first 10 chemical risk evaluations under the amended TSCA, all by a very ambitious deadline and
- Provided critical legal support for implementing a Presidential Executive Order directing EPA and the Army Corps to review and publish for notice and comment a proposed rule rescinding or revising the definition of "Waters of the United States" under the Clean Water Act.

**Performance Measure Targets:**

| | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(RG1) Percentage of legal deadlines met by EPA.** | No Target Established | TBD |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$2,864.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$10,229.0/ -58.3 FTE) This net program change is a reduction in FTE and non-pay resources for lower priority activities as EPA will focus on litigation support for core environmental programs.

- (+5.5 FTE) This program change reflects an increase in fee funded reimbursable FTE to support planned TSCA fee workload.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

## Legal Advice: Support Program

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$14,489.7*** | ***$15,170.0*** | ***$16,451.0*** | ***$1,281.0*** |
| Total Budget Authority | $14,489.7 | $15,170.0 | $16,451.0 | $1,281.0 |
| Total Workyears | 77.7 | 92.8 | 90.4 | -2.4 |

**Program Project Description:**

This program provides legal representational services, legal counseling and legal support for all activities necessary for EPA's operations.[63] It provides legal counsel and support on issues including, but not limited to: appropriations, claims, contracts, employment law, grants, information law, intellectual property law, real property, and all aspects of civil rights law.

For example, if an EPA program office needs to know how to respond to a Freedom of Information Act (FOIA) request, whether it may spend money on a certain activity, or what to do when a plaintiff files a tort claim against the Agency, this program is the source of answers, options, and advice. This program supports EPA in maintaining high ethical standards and in complying with all laws and policies that govern the Agency's operations.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to address and manage information requests, legal support for work under the Civil Rights Act, and employment law. There also is an ongoing need for a high level of involvement in questions related to contracts, grants, finance, appropriations, and employment.

In addition to the increase in employee and labor relations matters, litigation and appeals under the Freedom of Information Act (FOIA) have continued to increase steadily in both number and complexity. In FY 2019, EPA anticipates additional support to focus on responding to the increased number of complex and challenging information requests. In FY 2019, EPA will work to centralize our management of FOIA requests to achieve efficiencies in processing. While the Agency will provide targeted counselling on the most complex and challenging FOIA requests, it will redirect other counselling resources to litigation.

[63] Resources for legal services to support Environmental programs are included in the Legal Advice: Environmental program.

The following examples illustrate this program's important role in increasing transparency and public participation:

- Partnered with the Office of Environmental Information to develop FOIA training opportunities. More than 180 Agency FOIA professionals were trained to ensure that EPA is effectively and efficiently responding to the public's FOIA requests. These training opportunities are particularly critical given that the Agency expects to receive as many as 12,500 FOIA requests in FY 2018, which is about 2,000 requests more than received in FY 2016 and the most FOIA requests the Agency has received in at least 10 years.

**Performance Measure Targets:**

| **(FO1) Reduce the FOIA backlog.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | TBD |

| **(FO2) Percentage of FOIA requests completed within statutory deadlines.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | TBD |

**FY 2019 Change from FY 2018 Annualized Continue Resolution (Dollars in Thousands):**

- (+$2,244.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$963.0/ -5.9 FTE) This program change is a reduction in FTE and non-pay resources for lower priority activities. EPA will focus on counseling and legal advice to the highest agency priorities and focus on litigation support.

- (+3.5 FTE) This program change is an increase in fee funded reimbursable FTE to support planned TSCA fee workload.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Regulatory/Economic-Management and Analysis**

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$15,498.4*** | ***$15,011.0*** | ***$15,532.0*** | ***$521.0*** |
| Total Budget Authority | $15,498.4 | $15,011.0 | $15,532.0 | $521.0 |
| Total Workyears | 82.4 | 81.3 | 74.0 | -7.3 |

## Program Project Description:

The Regulatory/Economic, Management and Analysis program is responsible for reviewing Agency regulations to ensure that they are developed in accordance with the governing statutes, executive orders, and Agency commitments and are based on sound technical, economic and policy assumptions. Further, the program ensures consistent and appropriate economic analysis of regulatory actions, analyzes regulatory and non-regulatory approaches, and considers interactions between regulations across different environmental media. The program establishes compliance with Executive Order (EO) 13771 by ensuring that the costs and cost savings of EPA's actions are fully and appropriately estimated. This program also ensures Agency regulations comply with additional statutory and EO requirements, including the Congressional Review Act, the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act), and EOs 12866 and 13563 regarding the Office of Management and Budget (OMB) regulatory review.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in EPA's FY 2018 - 2022 Strategic Plan. The program assists the Administrator and senior agency staff in implementing new regulatory policy priorities, including EO 13771 (Reducing Regulation and Controlling Regulatory Costs), EO 13777 (Enforcing the Regulatory Reform Agenda), EO 13783 (Promoting Energy Independence and Economic Growth), and EO 13790 (Promoting Agriculture and Rural Prosperity in America).

In FY 2019, EPA will continue its efforts to assess, review, and improve its regulations while considering costs and burdens to businesses, jobs, communities, government entities, and the economy, and maximizing the net benefits to protect human health and the environment. Key program activities planned include:

- Continue to manage EPA's implementation of EOs, including development and management of the annual regulatory budget, analyzing potential areas of cost savings, and maintaining a new website that provides information about deregulatory actions.

- Continue to manage the costs of EPA's regulations, ensuring that the Agency complies with its regulatory budget and ensuring that EPA continues to meet or exceed the goal of repealing two regulations for each new regulation issued, pursuant to EO 13771.

- Review economic analyses prepared by EPA to ensure compliance with OMB Circular A-4 on Regulatory Analysis, EO 12866, and other related requirements. Provide the Administrator and the public with high-quality analysis of the costs, benefits, and impacts on jobs, businesses, and communities to better inform decision-making and ensure transparency about the consequences of regulation.[64]

- Update EPA's *Guidelines for Preparing Economic Analyses* to ensure that analyses provide a complete accounting of the impacts of regulatory actions, including involuntary unemployment and distributional consequences. Apply the best economy-wide modeling tools to assess the economic effects of environmental regulatory options, including methods designed to examine the distribution of regulatory burdens.

- Continue to develop EPA's semiannual unified Regulatory Agenda, while ensuring EPA complies with requirements under EO 13771.

- Manage EPA's internal Action Development Process, and expand and upgrade regulatory planning and tracking tools to facilitate timely decisions and coordination across programs.

- Serve as EPA's liaison with the Office of Information and Regulatory Affairs (OIRA) within OMB.

- Serve as EPA's liaison with the Office of the Federal Register by reviewing, editing, and submitting documents for publication so that the public, states, other agencies, and Congress are informed about EPA's regulatory activities in a timely manner.

- Develop, in conjunction with other EPA programs (i.e., air, water, etc.), improved analytical tools to advance EPA's risk assessment methods used in quantifying human health effects.

**Performance Measure Targets:**

| **(RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | -$40 Million | TBD |

| **(RG3) Number of EO 13771 regulatory actions issued.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | TBD |

[64] For more information: https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses.

| (RG4) Number of EO 13771 deregulatory actions issued. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | No Target Established | TBD |

| (RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 2,000,000 | 2,000,000 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$863.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$342.0/ -7.3 FTE) This net program change reflects a focus to implement regulatory policy priorities and to assess, review, and improve the Agency's regulations and underlying economic tools, in accordance with new Executive Orders.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Science Advisory Board**

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$3,820.3*** | ***$3,736.0*** | ***$3,779.0*** | ***$43.0*** |
| Total Budget Authority | $3,820.3 | $3,736.0 | $3,779.0 | $43.0 |
| Total Workyears | 18.4 | 21.6 | 18.7 | -2.9 |

**Program Project Description:**

Congress established EPA's Science Advisory Board in 1978, under the Environmental Research, Development, and Demonstration Act, to advise the Administrator on a wide range of highly visible and important scientific matters. The Clean Air Scientific Advisory Committee was established in 1977, under the Clean Air Act Amendments of 1977, to provide independent advice to EPA's Administrator on the technical bases for EPA's National Ambient Air Quality Standards. The SAB and the CASAC, both statutorily-mandated chartered Federal Advisory Committees, draw from a balanced range of non-EPA scientists and technical specialists from academia, states, independent research institutions, and industry. This program provides management and technical support to these advisory committees, which provide EPA's Administrator with independent advice and objective scientific peer review on technical aspects of environmental issues, as well as, the science used to establish criteria, standards, regulations, and research planning.[65]

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. FY 2019 resource levels are an opportunity for EPA's SAB to reprioritize activities. Authorizing legislation and scientific integrity mandate that each peer review meets certain minimum standards for a successful independent review.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$904.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

[65] For more information: "http://www.epa.gov/sab/, http://www.epa.gov/casac/".

- (-$861.0/ -2.9 FTE) This program change reflects a reduction in the Science Advisory Board program through streamlined support for conducting peer reviews, hosting meetings to assess Integrated Risk Information System chemicals, and implementing business process improvements to assure logistical support is provided to help the SAB and CASAC adhere to the provisions of Federal Advisory Committee Act.

**Statutory Authority:**

Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Federal Advisory Committee Act (FACA); Clean Air Act (CAA).

**Alternative Dispute Resolution**
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$1,142.0*** | ***$1,015.0*** | ***$0.0*** | ***-$1,015.0*** |
| Hazardous Substance Superfund | $591.3 | $667.0 | $0.0 | -$667.0 |
| Total Budget Authority | $1,733.3 | $1,682.0 | $0.0 | -$1,682.0 |
| Total Workyears | 7.5 | 6.7 | 0.0 | -6.7 |

**Program Project Description:**

EPA's General Counsel and Regional Counsel Offices provide environmental Alternative Dispute Resolution (ADR) services and workplace conflict prevention. EPA utilizes ADR as a method for preventing or resolving conflicts prior to engaging in formal litigation. ADR includes the provision of legal counsel, facilitation, mediation and consensus building advice and support. This program oversees a strategically-sourced contract for these services that provides mediation, facilitation, public involvement, training, and organizational development support to all headquarters and regional programs.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been proposed for elimination for this program in FY 2019.

**Performance Measures Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,015.0/ -5.3 FTE) This program change eliminates the centralization of the conflict prevention and ADR program. Programs across the Agency may pursue ADR support services and training individually.

**Statutory Authority:**

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 111, 117, 122; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Regional Science and Technology**

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$1,398.2*** | ***$1,406.0*** | ***$0.0*** | ***-$1,406.0*** |
| Total Budget Authority | $1,398.2 | $1,406.0 | $0.0 | -$1,406.0 |
| Total Workyears | 3.7 | 2.0 | 0.0 | -2.0 |

**Program Project Description:**

The Regional Science and Technology (RS&T) program provides assistance to programs implementing the Resource Conservation and Recovery Act; Toxic Substances Control Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; and Comprehensive Environmental Response, Compensation and Liability Act. The RS&T program performs laboratory analysis, field monitoring, and sampling investigations in order to provide credible scientific data on environmental pollutants and conditions to agency decision makers.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been proposed for elimination for this program in FY 2019. The Agency is working to establish a comprehensive enterprise-wide laboratory approach.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,406.0/ -2.0 FTE) This funding change proposes to eliminate the RS&T program. The Agency is working to establish a comprehensive enterprise-wide laboratory approach.

**Statutory Authorities:**

Resource Conservation and Recovery Act; Toxic Substances Control Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Pollution Prevention Act; Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Operations and Administration

**Acquisition Management**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$31,042.0*** | ***$30,803.0*** | ***$25,438.0*** | ***-$5,365.0*** |
| Leaking Underground Storage Tanks | $144.7 | $146.0 | $138.0 | -$8.0 |
| Hazardous Substance Superfund | $22,103.1 | $21,296.0 | $21,296.0 | $0.0 |
| Total Budget Authority | $53,289.8 | $52,245.0 | $46,872.0 | -$5,373.0 |
| Total Workyears | 277.0 | 304.5 | 259.5 | -45.0 |

## Program Project Description:

Environmental Program and Management (EPM) resources in the Acquisition Management program support EPA's contract activities, which coverplanning, awarding and administering contracts for the Agency. Efforts include issuing acquisition policy and interpreting acquisition regulations; administering training for contracting and program acquisition personnel; providing advice and oversight to regional procurement offices; and providing information technology improvements for acquisition.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Federal Procurement Policy (OFPP). With its contract expiring in FY 2019, EPA will evaluate options for replacing EPA's Acquisition System (EAS) with a government-wide shared service for contract writing system. EPA will target a strategic, government-wide solution that leverages economies of scale using the shared knowledge and processes from other federal agencies. The Agency will focus on a solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes.

In FY 2019, EPA will continue to implement Best-in-Class (BIC) solutions to identify pre-vetted, government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[66] Through BIC solutions, EPA will leverage acquisition experts to optimize

[66] For additional information, refer to: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*

spending within the government-wide category management framework and increase the transactional data available for agency level analysis of buying behaviors. In FY 2019, EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals.

The SSP also allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP can transform the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. The Agency has established a goal of obtaining at least five percent savings for all strategically sourced categories of goods and services. Through FY 2017, EPA has saved approximately $10 million from strategic sourcing initiatives focused on VoIP, laboratory supplies, print, cellular services, shipping, office supplies, equipment maintenance, and software. In FY 2019, EPA anticipates between $4 and $4.5 million in savings. In FY 2019, EPA will continue to focus on implementing the Financial Information Technology Acquisition Reform Act (FITARA) by:

- Avoiding vendor lock-in by competing contracts with multiple vendors or confining the scope of the contract to a limited task; and
- Developing acquisition vehicles that support the Agency in FITARA implementation.

**Performance Measure Targets:**

| **(PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | SA: 75%<br>CP: 65%<br>FAA: 80% | SA: 80%<br>CP: 70%<br>FAA: 85% |

| **(PR2) Acquisition costs avoided through use of strategic sourcing.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | $3,000,000 | $4,000,000 |

SA: Simplified Acquisition; CP: Competitive Proposals; FAA: Funding and Administrative Actions

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$727.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$6,092.0/ -30.0 FTE) This program change streamlines contractor support for: helpdesk services for EPA's Acquisition System*;* the closeout of contracts; and the Defense Contract Management Agency for Audit Services and the Virtual Acquisition Office (a source for up-to-date government acquisition news, research, and analysis). This reduction also eliminates funding for Contracts Management Assessment Program Reviews which enable

the agency to self-identify and remedy internal weaknesses, and reduces the Agency's training for its acquisition community.

**Statutory Authority:**

Office of Federal Procurement Policy Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Central Planning, Budgeting, and Finance**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$73,003.2*** | ***$71,493.0*** | ***$68,635.0*** | ***-$2,858.0*** |
| Leaking Underground Storage Tanks | $373.2 | $404.0 | $420.0 | $16.0 |
| Hazardous Substance Superfund | $22,511.4 | $21,345.0 | $21,152.0 | -$193.0 |
| Total Budget Authority | $95,887.8 | $93,242.0 | $90,207.0 | -$3,035.0 |
| Total Workyears | 450.5 | 493.4 | 430.6 | -62.8 |

## Program Project Description:

Activities under the Central Planning, Budgeting and Finance program support the management of integrated planning, budgeting, financial management, performance and risk assessments and reporting, and financial systems to ensure effective stewardship of resources. This includes managing and supporting the Agency's performance management system consistent with the Government Performance and Results Modernization Act of 2010 that involves: strategic planning and accountability for environmental, fiscal, and managerial results; executing an Enterprise Risk Management program to support effective and efficient mission delivery and decision making; providing policy, systems, training, reports, and oversight essential for EPA's financial operations; managing the agencywide Working Capital Fund; providing financial payment and support services for EPA through three finance centers, as well as specialized fiscal and accounting services for many of EPA programs; and managing the Agency's annual budget process. This program also supports the Digital Accountability and Transparency (DATA) Act of 2014 and Federal Information Technology Acquisition Reform Act (FITARA) of 2015 requirements.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. EPA will maintain key planning, budgeting, and financial management activities. EPA will sustain basic operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System, and related financial reporting systems. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

EPA will continue to modernize and streamline business processes and operations to promote transparency and efficiency. The program will apply Lean principles and leverage input from

customer-focused councils, advisory groups and technical workgroups to continue improving as a high performance organization. EPA will standardize and streamline internal business processes and use additional federal and/or internal shared services when supported by business case analysis.

In FY 2019, the program will continue to focus on core responsibilities in the areas of strategic planning, performance assessment and reporting, and enterprise risk management; budget preparation; financial reporting; and, transaction processing. As the Agency lead in designing and implementing performance and risk management strategies that inform agency decision making and advance mission results, the program will focus on driving progress toward the Administrator's priorities by regularly assessing performance results against ambitious targets, monitoring and mitigating risks, and adjusting strategies as needed. This includes convening regular Performance Reviews to assess progress; promoting an increased use of data analytics and evidence-based decision making practices; working collaboratively with agency programs to assess and analyze performance and risk data; and providing technical assistance on agencywide measures governance to enhance data quality. EPA also will continue to use the performance data and other evidence to answer fundamental business questions and identify opportunities for service improvements.

During FY 2019, EPA will focus on the Financial Management - Payment Processing Modernization (PPM) project. The goal of PPM is to deliver a streamlined approach for the end-to-end delivery of financial transactions from the commitment through the payment. Through coordination across EPA, this project seeks to standardize the processing of financial transactions and reduce the total number of electronic systems used for processing the financial activity associated with contracts, grants, and interagency agreements. This approach will deliver an integrated financial and acquisition/grants systems that meets user needs, supports data quality, and enables data analytics. This project will reduce the IT costs, streamline business processes, improve data reliability and security, and position the Agency to leverage additional federal/non-federal financial services and systems capabilities.

The program will continue to support FITARA requirements in accordance with EPA's Implementation Plan.[67] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that IT needs are properly planned and resourced in accordance with FITARA.

EPA is dedicated to reducing fraud, waste, and abuse and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of 2002, EPA has reviewed, sampled, and monitored its payments to protect against erroneous payments. The Agency's payment streams are consistently well under the government-wide threshold of 1.5 percent and $10 million of estimated improper payments. EPA conducts risk assessments in its principal payment streams, including grants, contracts, commodities, payroll, travel, purchase cards, and the Clean and Drinking Water State Revolving Funds. When overpayments are identified, they are promptly recovered. EPA has expanded its risk assessments, performed statistical sampling, set appropriate reduction/recovery targets, and implemented corrective action plans. The Agency conducts these activities to reduce the potential for improper payments and

[67] For more information: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

ensure compliance with the Improper Payments Information Act, as amended by the Improper Payments Elimination and Recovery Act of 2010 (P.L. 111-204) and the Improper Payments Elimination and Recovery Act of 2012 (P.L. 112-248).

**Performance Measure Targets:**

| (CF2) Number of agency administrative subsystems. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 24 | 22 |

| (CF1) Number of administrative shared services. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 6 | 7 |

| (CF3) Average cost per payment transaction. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 34.99 | 34.99 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,368.0) This net change to fixed and other costs is an increase due to the recalculation of base essential workforce support costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$6,864.0/ -50.0 FTE) This program change streamlines efforts in the areas of strategic planning, budget preparation, financial reporting and transaction processing.

- (+$2,638.0) This program change is an increase that supports the Financial Management - Payment Processing Modernization project. This project will reduce IT costs, streamline business processes, improve the data reliability and security, and position the Agency to leverage additional federal/non-federal financial services and systems capabilities.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA’s organic statute).

**Facilities Infrastructure and Operations**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$293,997.9*** | ***$305,844.0*** | ***$300,738.0*** | ***-$5,106.0*** |
| Science & Technology | $64,642.7 | $67,875.0 | $68,834.0 | $959.0 |
| Building and Facilities | $26,065.5 | $27,602.0 | $33,377.0 | $5,775.0 |
| Leaking Underground Storage Tanks | $502.2 | $793.0 | $773.0 | -$20.0 |
| Inland Oil Spill Programs | $376.2 | $580.0 | $665.0 | $85.0 |
| Hazardous Substance Superfund | $69,651.3 | $75,985.0 | $74,144.0 | -$1,841.0 |
| Total Budget Authority | $455,235.8 | $478,679.0 | $478,531.0 | -$148.0 |
| Total Workyears | 323.4 | 356.7 | 318.0 | -38.7 |

**Program Project Description:**

Environmental Program and Management (EPM) resources in the Facilities Infrastructure and Operations program fund the Agency's rent, utilities, and security. This program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, printing, mail, and transportation services. Funding is allocated for such services among the major appropriations for the Agency.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will continue to invest to reconfigure EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[68] the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical.

Between FY 2015 and FY 2019 EPA will have released over 850,000 square feet of space nationwide, resulting in a cumulative annual rent avoidance of nearly $30 million across all appropriations. These savings help offset EPA's escalating rent and security costs. Currently planned consolidations through FY 2019 will allow EPA to release an estimated 306,000 square

[68] For additional information, refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

feet of space. For FY 2019, the Agency is requesting $157.89 million for rent, $8.83 million for utilities, and $23.50 million for security in the EPM appropriation.

In FY 2019, the Agency will continue to explore opportunities to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. Through FY 2019, space consolidation (i.e. releasing floors or portions of leased space) in Regions 2, 3, 6 and 8 will cumulatively release over 226,000 square feet and save approximately $7.8 million in rent. Space consolidation and reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial B&F funding to achieve long-term cost avoidance.

At the requested resource levels, EPA will continue to manage lease agreements with GSA and other private landlords, maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, On-Scene Coordinators), and track capital equipment of $25 thousand or more.

**Performance Measure Targets:**

| **(FA1) Reduction in EPA Space (sq. ft. owned and leased).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 241,000 | 65,000 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$3,839.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$6,284.0) This change to fixed and other costs rebalances funding proportions across major appropriation accounts. This change also includes a decrease to other fixed costs (e.g., utilities, security).

- (-$2,661.0/ -36.4 FTE) This net program change reflects a reduction in programs associated with environmental management systems, comprehensive facility energy audits, re-commissioning, and sustainable building design. Activities impacted in FY 2019 include:
- support for employee wellness and worklife initiatives such as federal cost sharing for health wellness and CPR/AED training services, and libraries;
  - preventative maintenance of facilities, equipment, and vehicle fleet;
  - custodial services; and
  - Agency's mail delivery services.

**Statutory Authority:**

Federal Property and Administration Services Act; Public Building Act; Robert T. Stafford Disaster Relief and Emergency Assistance Act; Clean Water Act; Clean Air Act; Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Community Environmental Response Facilitation Act (CERFA); Energy Policy Act of 2005; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Financial Assistance Grants / IAG Management**

Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$24,444.8*** | ***$25,416.0*** | ***$18,986.0*** | ***-$6,430.0*** |
| Hazardous Substance Superfund | $2,997.4 | $2,611.0 | $2,611.0 | $0.0 |
| Total Budget Authority | $27,442.2 | $28,027.0 | $21,597.0 | -$6,430.0 |
| Total Workyears | 152.4 | 161.2 | 115.7 | -45.5 |

## Program Project Description:

Environmental Program and Management (EPM) resources in the Financial Assistance Grants and Interagency Agreement (IA) Management program support the management of grants and IAs, and suspension and debarment activities. Grants comprise approximately 40 percent of EPA's overall budget. Resources in this program ensure that EPA's management of grants and IAs meet the highest fiduciary standards, that grant and IA funding produces measurable results for environmental programs, and that the suspension and debarment program effectively protects the government's business interest.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In accordance with the overarching 2016-2020 EPA Grants Management Plan (GMP), and EPA's Strategic Plan, EPA will continue to implement activities to achieve efficiencies while enhancing quality and accountability. EPA will invest to modernize grant and IA IT systems by:

- Completing the migration away from aging Lotus Notes technology. For Grants, EPA is evaluating a federal Centers of Excellence solution for comprehensive and cost-effective grants management. EPA is targeting a platform that will streamline and standardize Agency processes, using the shared knowledge from other cabinet level and independent agencies. EPA is currently evaluating solutions based on their access to information, services, and reporting while enhancing the overall user experience. For IAs, EPA will integrate business solution using EPA's Interagency Document Online Tracking System (IDOTS).

- Eliminating reliance on paper for records and improving records management. For Grants, EPA will identify a solution that adopts electronic records management capabilities. For IAs, EPA will integrate with the Agency's internal electronic records management tool (ECMS) using Documentum technology.

- Strengthening decision making with improved and standardized reporting capabilities. For Grants, EPA will centralize common reporting tools and other capabilities through a standardized platform. For IAs, EPA will consolidate technology and capabilities to leverage the Agency's existing financial reporting system.

In addition to IT-related investments, the GMP focuses on reducing the administrative burden on EPA and grants recipients, and on improving grants management procedures. Specifically, the Agency will continue to: 1) fully implement the streamlining reforms in OMB's Uniform Grants Guidance; 2) streamline EPA's grants management by ensuring policies conform to a new comprehensive framework; 3) review, refine, and streamline Lean grants management processes; and 4) Implement Lean recommendations for Intergovernmental Review (IR), which includes reducing the number of programs that require IR, automating the IR process as much as possible, and superseding/archiving EPA's IR policy. This will ensure that EPA is compliant with IR requirements without placing additional burden on EPA staff and applicants.

EPA is a recognized leader in suspension and debarment. The Agency will continue to make aggressive use of discretionary debarments and suspensions as well as statutory debarments under the Clean Air Act and Clean Water Act to protect the government's business interests. In FY 2019, EPA will focus suspension and debarment activity to the most egregious violations. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and non-procurement awards (for example: grants, cooperative agreements, loans, and loan guarantees). A number of recent federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs in order to protect taxpayers from bad actors.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$643.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5,962.0/ -43.1 FTE) This program change reflects expected efficiencies in the processing of grant and IA awards, lower requested grant funding levels throughout the Agency and a review of unliquidated obligations. EPA will target funds to core grant and IA activities.

- (-$1,111.0) This program change is a decrease based on the Agency's shift to focusing on core grants management operations, which include pre-award reviews; post-award monitoring; compliance; administrative advanced monitoring reviews; management effectiveness reviews; baseline monitoring; and audit follow-up activities on the highest risk awards.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act, § 2455.

**Human Resources Management**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$50,608.8*** | ***$43,930.0*** | ***$40,860.0*** | ***-$3,070.0*** |
| Hazardous Substance Superfund | $5,380.1 | $5,997.0 | $5,497.0 | -$500.0 |
| Total Budget Authority | $55,988.9 | $49,927.0 | $46,357.0 | -$3,570.0 |
| Total Workyears | 249.5 | 247.9 | 223.8 | -24.1 |

## Program Project Description:

Environmental Programs and Management (EPM) resources for the Human Resources (HR) Management program support human capital activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical human capital functions including recruitment, hiring, employee development, performance management, and workforce planning. EPM resources also support overall federal advisory committee management under applicable statues and guidance.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR enterprise risk management include attracting and retaining a high-performing, diverse workforce; implementing training and development programs; delivering employee services; streamlining HR processes; and strengthening performance management, labor, and employee relations programs. EPA will continue to support efforts that increase the quality of core operations, improve productivity, and achieve cost savings in mission-support functions including human capital management.

In FY 2019, the Agency will continue to strengthen its performance management activities, including implementing the Agency's 2017 performance management plan. EPA will procure and deploy a learning management system through the Department of Interior's Interior Business Center or the Office of Personnel Management. The system will assist in developing and delivering management tools, targeting and providing timely and high-impact training that streamlines administrative functions, leverages EPA's First Line Supervisors Advisory Group, and assists with organizing mentoring on an as-needed basis.

EPA will continue to focus on delivering statutorily required services associated with the Employee Counseling Assistance Program, the Federal Worker's Compensation Program, the Drug-free Workplace Program, and Unemployment Compensation. Furthermore, the Agency will

continue its focus on Labor and Employee Relations (LER) by administering and/or negotiating national labor agreements and providing advice, guidance, and assistance to regional and local level negotiations. EPA also will continue its efforts to strengthen managers' and supervisors' institutional knowledge on LER related matters through training and outreach; provide advisory and counseling support agencywide; and conduct analysis of human capital information to help managers be more successful.

EPA's advisory committees, which operate as a catalyst for public participation in policy development, implementation, and decision making, have proven effective in building consensus among the agency's diverse external partners and stakeholders. The Agency will continue to manage participation and collaboration to maximize the value these communities add to important policy considerations. EPA also will modernize the advisory committee administrative processes by implementing an electronic committee membership nomination and appointment process to improve operational efficiency, effectiveness, accuracy, and timeliness.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,562.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$4,632.0/ -24.1 FTE) This program change reflects a reduction for:
  - Operational support for the following HR programs being utilized agencywide: EPA's Child Care Subsidies; the Agency's recruitment and diversity and inclusion activities; EPA's Human Resources Council (HRC) and National Partnership Council (NPC); the Leave Bank; and the Workplace Solutions.
  - Enhancements and maintenance of EPA's HR IT Systems including HR Line of Business (LoB), data management and analysis, troubleshooting, and change requests;
  - Maintenance of EPA's University portal that provides online training and professional development;
  - Support for Federal Advisory Committees not mandated by statute; and
  - Centrally-provided, non-mandatory training.

**Statutory Authority:**

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Workforce Reshaping**

Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$0.0*** | ***$0.0*** | ***$25,549.0*** | ***$25,549.0*** |
| Science & Technology | $0.0 | $0.0 | $5,994.0 | $5,994.0 |
| Total Budget Authority | $0.0 | $0.0 | $31,543.0 | $31,543.0 |

**Program Project Description:**

Environmental Programs and Management (EPM) resources for the workforce reshaping program support organizational restructuring efforts throughout the U.S. Environmental Protection Agency. To help achieve its mission, EPA will develop, review and analyze mission requirements and implement options to effectively align and redistribute the Agency's workforce based on program priorities, resource reallocation, and technological advances.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. Effective workforce reshaping is critical to EPA's ability to accomplish its mission. EPA will be examining our statutory functions and processes to eliminate inefficiencies and streamline our processes. Primary criteria will include effectiveness and accountability, as EPA is focused on greater value and real results. These analyses will likely create a need to reshape the workforce. The Agency anticipates the need to offer voluntary early out retirement authority (VERA) and voluntary separation incentive pay (VSIP), and potentially relocation expenses, as part of the workforce reshaping effort.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$25,549.0) In support of the reprioritization of agency activities, this increase will support:
  - Voluntary early out retirement authority
  - Voluntary separation incentive pay
  - Workforce support costs for relocation of employees as we realign work assignments.

**Statutory Authority:**

5 U.S.C. 8336(d)(2) includes the statutory VERA provisions for employees covered by the Civil Service Retirement System. 5 U.S.C. 8414(b)(1)(B) includes the statutory VERA provisions for employees covered by the Federal Employees Retirement System. Section 1313(b) of the Chief Human Capital Officers Act of 2002 (Public Law 107-296, approved November 25, 2002) authorized the VSIP option under regulations issued by OPM, as codified in sections 3521 to 3525 of title 5, United States Code (U.S.C.).

# Pesticides Licensing

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$56,911.0*** | ***$55,696.0*** | ***$45,949.0*** | ***-$9,747.0*** |
| Science & Technology | $2,938.3 | $3,090.0 | $2,406.0 | -$684.0 |
| Total Budget Authority | $59,849.3 | $58,786.0 | $48,355.0 | -$10,431.0 |
| Total Workyears | 413.6 | 418.7 | 416.5 | -2.2 |

## Program Project Description:

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act (FQPA) of 1996 and the Pesticide Registration Improvement Extension Act of 2012[69] (or subsequent legislation), EPA is charged with protecting people from the health risks that pesticide use can pose. FIFRA requires EPA to register pesticide products before they are allowed to be marketed for use in the United States. Registration is based on review of scientific data sufficient to demonstrate that the product can perform its intended function without unreasonable adverse effects on people or the environment.

The statutes above charge EPA with issuing pesticide registrations and setting tolerances (maximum residue levels) for pesticides in food and animal feed and with periodically reviewing the registrations and tolerances that the Agency issues, to ensure that public health is adequately protected. The program addresses these requirements by conducting risk assessments using the latest scientific methods for new and existing pesticides. Agency scientists examine the risks that pesticides pose to human health through the diet and through exposure at work, at home, in school, or at play. EPA's Pesticide Program also reduces the risks of disease by ensuring the efficacy of public health pesticides (pesticides that control pests or bacteria that are a vector for disease or for other recognized health protection uses). EPA encourages the development and use of safer pesticides and educates pesticide users and the public in general through labeling as well as public outreach.

*Pesticide Registration and Tolerance Setting*

[69] Authority provided under the Pesticide Registration Improvement Extension Act of 2012 expired on September 30, 2017. Authority to continue to collect fees has been authorized by H.R. 601 - Continuing Appropriations Act, 2018, and subsequent Continuing Resolutions through February 8, 2018.

Under the FFDCA, if a pesticide is to be used in a manner that may result in pesticide residues in food or animal feed, before it can be registered, EPA must establish a tolerance, or maximum legal residue level or exemption from the requirement of a tolerance, for each affected food or feed commodity. To establish a tolerance, EPA must find that the residues are "safe," which, under FFDCA, means that there is a reasonable certainty of no harm to human health from aggregate exposure to the pesticide residue in food and from all other exposure except occupational exposure.

The passage of FQPA in 1996, which amended both FIFRA and FFDCA, not only introduced this stricter safety standard, it also mandated the consideration of a number of other factors including cumulative and aggregate effects. When assessing a pesticide registration or tolerance, EPA must consider the cumulative effects of related pesticides with a common mode of toxicity and the potential for endocrine disruption effects, and apply an appropriate safety factor to ensure the protection of infants and children as outlined below. In addition, EPA must include aggregate exposure, including all dietary exposure, drinking water, and non-occupational exposures. All these pesticide exposures from food, drinking water, and home and garden use must be considered when determining allowable levels of pesticides in food. Since the passage of FQPA, EPA's risk assessment process must incorporate a 10-fold safety factor (10X) for infants and children unless reliable information in the database on the chemical indicates that it can be reduced or removed. Under FQPA, even the limited, temporary use under an emergency exemption may not be allowed without the establishment of a tolerance.

To comply with statutory mandates, EPA conducts risk assessments using the latest scientific methods to determine the risks that pesticides pose to human health, including reviewing comprehensive toxicity, residue chemistry, and other data submitted by pesticide manufacturers (registrants) as required by EPA, and consulting public literature or other sources of supporting information regarding the pesticide's effects or exposure. Toxicity data is used to identify the hazard potential of a pesticide. Residue chemistry data is used to determine the identity and amount of pesticide in or on food. The Agency reviews all data to make sure they were developed according to standard practices within the discipline and EPA's test guidelines. In addition to toxicity and residue chemistry data, EPA also may use other data to refine and make more realistic exposure assessments for residues on food and exposure to workers, bystanders and people who live, work, play, and go to school in treated areas. The result of these assessments could be the need for label restrictions in certain areas to reduce the exposure to safe levels. Risk assessments undergo an internal peer review, and regulatory decisions are posted on the Internet for review and comment to ensure that these actions are transparent and stakeholders are engaged in decisions affecting their health and environment. When complex scientific issues arise, the Agency consults the FIFRA Scientific Advisory Panel (http://www.epa.gov/scipoly/sap/) for independent scientific advice.

*Periodic Review of Registrations and Tolerances*

Not only must EPA conduct risk assessments before the initial registration of each pesticide for each use, but the FQPA amendments introduced the requirement that every pesticide registration be reviewed at least every 15 years. This periodic review is accomplished through our Registration Review Program.[70] In the interest of efficiency and fairness and to facilitate the assessment of

[70] For more information, see https://www.epa.gov/pesticide-reevaluation.

cumulative exposures, the Agency reviews certain related pesticides (such as the pyrethroids and pyrethrins, the neonicotinoids, or the fumigants) at the same time. Pesticide cases may be related by chemical class or structure, mode of action, use, or for other reasons.

*Ensuring Proper Use and Mitigating Risks of Pesticides through Labeling*

Under FIFRA, it is illegal to use a registered pesticide in a manner inconsistent with the label instructions and precautions. Therefore, EPA uses pesticide labels to indicate what uses are appropriate in order to ensure that the pesticide does not cause unreasonable adverse effects on human health or the environment, as determined by the risk assessment. EPA pesticide product registrations include required labeling instructions and precautions. When risks are identified during the initial registration or during registration review, the Agency may mitigate those risks by requiring label changes, for example, requiring personal protective equipment for applicators, or changing the application method or rate or the time when the treated area may be reentered. Ensuring the proper use of pesticides prevents unnecessary pesticide exposure to the person applying the pesticide and people working, living, or playing nearby. It also prevents excessive residues in the food people eat and in animal feed.

*Reducing Pesticide Risks to People through the Registration of Lower Risk Pesticides*

To further protect human health, this program emphasizes the use of reduced risk methods of pest control, including the use of reduced risk pesticides and helping growers and other pesticide users learn about new, safer products and methods of using pesticides. EPA began promoting reduced risk pesticides in 1993 by giving registration priority to pesticides that have lower toxicity to humans and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM).[71] Biological pesticides and biotechnology often represent lower risk solutions to pest problems.

Several other countries and international organizations also have instituted programs to facilitate registering reduced risk pesticides. EPA works with the international scientific community and the Organization for Economic Cooperation and Development (OECD) member countries to register new reduced risk pesticides and to establish related tolerances (maximum residue limits). Through these efforts, EPA can help reduce risks to Americans from foods imported from other countries.

*Protecting Workers from On-the-Job Pesticide Risks*

Millions of America's workers are exposed to pesticides in occupations such as agriculture, lawn care, food preparation, and landscape maintenance. Protecting workers from potential effects of pesticides is an important role of the pesticide program. Workers in several occupations may be exposed to pesticides when they prepare pesticides for use, such as by mixing a concentrate with water or loading the pesticide into application equipment; applying pesticides, such as in an agricultural or commercial setting; or when they enter an area where pesticides have been applied to perform allowed tasks such as picking crops.

[71] See U.S. Environmental Protection Agency, Pesticides: Health and Safety, Reducing Pesticide Risk internet site: http://www.epa.gov/pesticides/health/reducing.htm.

The Worker Protection Standard (WPS) and the certification and training rule are key elements of EPA's strategy for reducing occupational exposure to agricultural pesticides. Following signature of the revised rule, EPA immediately began an extensive schedule of trainings for state regulators and state inspectors, because training our state co-regulators is a top priority. While resource intensive, the Agency prioritized providing in-person training to states and regions to allow for face-to-face dialogue on the new requirements in the final rule issued in 2015.

In FY 2016 and FY 2017, EPA provided guidance materials to assist states and agricultural employers to understand the new WPS requirements that went into effect on January 2, 2017. In early 2017, the National Association of State Departments of Agriculture (NASDA) petitioned EPA to extend the implementation date for the WPS to allow for additional time for EPA to work with the states to ensure that sufficient materials were available to the agricultural community to successfully implement the new requirements. After working with NASDA and the States and Tribes to address their implementation issues, and in consideration of the regulatory burden associated with making the rule changes to legally delay the rule, EPA decided not to delay the implementation dates of the revised rule. Instead, EPA will focus on proposing revisions to targeted sections of the WPS based on stakeholder input received since issuance of the rule.

In FY 2017, EPA solicited comments on regulations that may be appropriate for repeal, replacement, or modification in keeping with Executive Order 13777, entitled "Enforcing the Regulatory Reform Agenda." EPA also held a public meeting of the Pesticide Program Dialogue Committee in May 2017 that included a session specifically devoted to receiving public feedback on potential pesticide regulatory reform opportunities for EPA's Regulatory Reform Task Force to consider. Although many commenters expressed their support for EPA's pesticide safety regulations, EPA also received comments that suggested specific changes were needed to the January 4, 2017, Certification of Pesticide Applicators final rule (amending the requirements at 40 CFR 171) and to the November 2, 2015, Worker Protection Standard final rule (which amended the regulations at 40 CFR 170). EPA expects to publish separate Notices of Proposed Rulemaking in FY 2018 to solicit public input on revisions to these rules." In FY 2019, EPA will work to finalize those proposed rule revisions and develop implementation plans for rolling out the final rules and necessary communications. EPA also will be planning numerous webinars and will respond to stakeholder requests as it continues with implementation of those parts of the two rules that are unaffected by the proposed revisions. For more information, see https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.

*Preventing Disease through Public Health Pesticides*

Antimicrobial pesticides play an important role in public health and safety by killing germs, bacteria, viruses, fungi, protozoa, algae, and slime. Some of these products are used to sterilize hard surfaces in hospitals. Chemical disinfection of hard, non-porous surfaces such as floors, bed rails and tables is one component of the infection control systems in hospitals, food processing operations, and other places where disease-causing microorganisms, such as bacteria and viruses, may be present. In reviewing registrations for antimicrobials, EPA is required to ensure that antimicrobials maintain their effectiveness.[72] EPA's Antimicrobial Testing Program has been testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products

[72]FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).

in the marketplace meet stringent efficacy standards. Other pesticides also protect public health, such as insecticides and rodenticides that combat insects and other pests that carry diseases such as West Nile virus, Lyme disease, and rabies.

*Outreach and Education*

Giving priority to reduced risk and Integrated Pest Management (IPM)-friendly pesticides are two steps toward protecting human health. It is important for people using pesticides to be well informed, to understand the importance of reading and following label directions and the importance of proper disposal, and they also need to understand how to protect themselves from pests that can transmit disease. The Pesticide Program invests in environmental education and training efforts for growers, pesticide applicators, and workers, as well as the public in general. EPA will continue to work to reduce the number and severity of pesticide exposure incidents by developing effective communication, environmental education, and training programs.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with statutory requirements. In addition, the Agency will be reviewing under the registration review program pesticides that are already in the market against current scientific standards for human health. To further advance EPA's work supporting environmental justice and children's health, EPA will process these registration requests with special consideration for susceptible populations, especially children. Specifically, EPA will focus on the foods commonly eaten by children in order to reduce children's pesticide exposure where the science identifies potential concerns. EPA uses data from various sources, including the Pesticide Data Program (PDP) and the National Health and Nutrition Examination Survey (NHANES), to assess children's potential risk from pesticides. Pesticide registration actions focus on the evaluation of pesticide products before they enter the market. EPA will review pesticide data and impose use restrictions and instructions needed to ensure that pesticides used according to label directions also will not result in unreasonable risk. During its pre-market review, EPA will consider human health and environmental concerns as well as the pesticide's potential benefits.

In FY 2019, as part of the Agency implementation of a Lean Management System, the program, in collaboration with stakeholders, will review business process and procedures to improve results and drive efficiencies while sustaining quality environmental outcomes. Among other efforts, the program will better leverage IT systems, such as the PRISM projects described below, which will enhance approximately 150 business processes. Over time, similar efforts in other programs have yielded significant results, including up to 40 percent reduction in business process steps or overall reduced burden in delivering environmental benefits.

EPA will continue to emphasize the registration of reduced risk pesticides, including biopesticides, in order to provide farmers and other pesticide users with new safer alternatives. In FY 2019, the Agency, in collaboration with the United States Department of Agriculture (USDA), will work to ensure that minor use registrations receive appropriate support. EPA will ensure that needs are met for reduced risk pesticides for minor use crops. Additionally, EPA will assist farmers and other

pesticide users in learning about new, safer products and methods of using existing products through workshops, demonstrations, small grants, and materials available on the website and in print. EPA also will continue to support biotechnology efforts to educate the American public about pesticides related water quality issues and standards.

During FY 2019, EPA will continue to review the registrations of existing pesticides and develop work plans for pesticides entering the review pipeline. The priority will be toward reviewing those pesticides where there is indication of a need to mitigate risk. The goal of the registration review process is to review pesticide registrations every fifteen years to ensure that pesticides already in the marketplace meet the most current scientific standards and to address concerns identified after the original registration.[73] The completion of the first round of these reviews is due in FY 2022. This program, as mandated by statute, supports EPA's priorities including ensuring the safety of chemicals and protecting America's waters.

For pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. There are a total of 725 such cases. For each case, the steps in this process include, in this order, opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. It is important to open dockets and develop work plans for as many cases as possible early in the process so that there is time to complete the risk assessments and make decisions by the 2022 deadline. The Agency met its obligations for opening dockets and completing work plans so it can now focus its resources on completing risk assessments and making decisions to meet its statutory deadline by 2022. EPA completed the opening of all 725 dockets in 2017 and shifted the focus in FY 2019 to continue analysis of these documents.

In FY 2019, the Agency will continue to work toward our commitment to environmental justice and protection of children's health. Under the Food Quality Protection Act, EPA is statutorily required to ensure that its regulatory decisions are protective of children's health and other vulnerable subpopulations. EPA will continue to provide locally-based technical assistance and guidance by partnering with states and tribes on implementation of pesticide decisions. Technical assistance and outreach such as workshops, demonstration projects, briefings, and informational meetings also will continue in areas including pesticide safety training and use of lower risk pesticides.

EPA will continue to engage the public, the scientific community, and other stakeholders in its policy development and implementation. This will encourage a reasonable transition for farmers and others from the older, potentially more hazardous pesticides, to the newer pesticides that have been registered using the latest available scientific information.

In FY 2019, EPA will continue ongoing work to implement improvements to the Pesticide Registration Information System (PRISM). Work on PRISM and other areas will include streamlining operations and merging compatible and related work areas in order to maximize resources through management efficiencies and direct reporting improvements. The focus of the project is to achieve paperwork burden reduction by converting paper-based processes into

[73] See U.S. Environmental Protection Agency, Registration Review Internet site: http://www.epa.gov/oppsrrd1/registration_review/index.htm

electronic processes for the Pesticide program's regulated entities, creating a streamlined electronic workflow to support pesticide product registration and chemical review, and creating a centralized repository of regulatory decisions and scientific information. Overall, the PRISM project will streamline approximately 150 existing business processes.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$249.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$9,996.0/ -45.6 FTE) This program change reflects a reduction in funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

**Statutory Authority:**

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA), §408.

**Pesticides: Protect the Environment from Pesticide Risk**

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$36,654.9*** | ***$38,302.0*** | ***$28,727.0*** | ***-$9,575.0*** |
| Science & Technology | $2,046.2 | $2,325.0 | $2,122.0 | -$203.0 |
| Total Budget Authority | $38,701.1 | $40,627.0 | $30,849.0 | -$9,778.0 |
| Total Workyears | 271.1 | 269.3 | 268.4 | -0.9 |

## Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires EPA to register a pesticide if, among other things, when used in accordance with labeling and common practices, the product "also will not generally cause unreasonable adverse effects on the environment." The goal of this program is to protect the environment from the potential risks posed by pesticide use. EPA must conduct risk assessments before the initial registration of each pesticide for each use, as well as re-evaluate each pesticide at least every 15 years, as required by the Food Quality Protection Act (FQPA). This periodic review is accomplished through EPA's Pesticide Registration Review program.

In addition to FIFRA responsibilities, the Agency has distinct obligations under the Endangered Species Act (ESA). These include ensuring that pesticide regulatory decisions also will not destroy or adversely modify designated critical habitat or jeopardize the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS) (jointly, the Services).

*Assessing the Risks Pesticides Pose to the Environment*

To accomplish the goals set out in the two statutes, EPA conducts ecological risk assessments[74] to determine what risks are posed by each pesticide to plants, animals, and ecosystems that are not the targets of the pesticide and whether changes are necessary to protect the environment. EPA has extensive authority to require the submission of data to support its scientific decisions and uses the latest scientific methods to conduct these ecological risk assessments. The Agency requires applicants for pesticide registration to conduct and submit a wide range of environmental laboratory and field studies. These studies examine the ecological effects or toxicity of a pesticide and its breakdown products on various terrestrial and aquatic animals and plants, and the chemical fate and transport of the pesticide (how it behaves and where it enters the soil, air, and water). EPA uses these and other data to prepare an environmental fate assessment and a hazard, or

[74] https://www.epa.gov/endangered-species

ecological effects, assessment that interprets the relevant toxicity information for the pesticide and its degradation products. Using environmental fate data and exposure models, EPA's scientists estimate exposure of different animals and plants to pesticide residues in the environment. Finally, these scientists integrate the toxicity information with the exposure data to determine the ecological risk from the use of the pesticide, or whether it is safe for the environment and wildlife. These processes are described more fully below.

*Assessing Toxicity to Wildlife and Plants*

Toxicology studies are carried out on plants and animals that have been chosen for testing because they broadly represent non-target organisms (living things the pesticide is not intended to kill or otherwise control). Animals and plants are exposed to different amounts of a pesticide to determine short- and long-term responses to varying concentrations. Some of the impacts on animals EPA evaluates are the short- and long-term effects of varying amounts of pesticide exposure to insects and other invertebrates, fish, and birds. For plants, EPA scientists assess how poisonous a pesticide is to plants, how the pesticide affects a seed's ability to germinate and emerge, as well as how healthy and vigorous the plant grows to be. Toxicological testing and scientific measurements are conducted under strict guidelines and approved methods.[75] Exacting standards are necessary for consistency in evaluations of pesticide safety and for comparisons among chemicals.

*Determining the Environmental Fate of a Pesticide*

After determining the toxicity of a pesticide, it is important to find out what happens to it in the environment after it has been applied, and therefore, how it might affect the environment. Required studies measure the interaction of pesticides with soils, air, sunlight, surface water and ground water. Some of the basic questions that must be answered in these studies are: (1) How fast and by what means does the pesticide degrade? (2) What are the breakdown chemicals? and (3) How much of the pesticide or its breakdown chemicals will travel from the application site, and where will they accumulate in the environment? These tests include how the pesticide breaks down in water, soil, and light, how easily it evaporates in air and how quickly it travels through soil. EPA uses these tests to develop estimates of pesticide concentrations in the environment. EPA scientists evaluate the role of the drift of spray and dust from pesticide applications on pesticide residues that can cause health and environmental effects and property damage.

*Putting the Pieces Together*

To evaluate a pesticide's environmental risks, EPA examines all of the toxicity and environmental fate data together to determine what risks its use may pose to the environment. The process of comparing toxicity information and the amount of the pesticide a given organism may be exposed to in the environment is called risk assessment. A pesticide can be toxic at one exposure level, and have little or no effect at another. Thus, the risk assessor's job is to determine the relationship between possible exposure to a pesticide and the resulting harmful effects.

If the ecosystem will not be exposed to levels of a pesticide shown to cause problems, EPA concludes that the pesticide is not likely to harm plants or wildlife. On the other hand, if the

[75]http://www.epa.gov/raf/publications/guidelines-ecological-risk-assessment.htm http

ecosystem exposure levels are suspected or known to produce problems, the program will then work to better understand and reduce the risks to acceptable levels. If the risk assessment indicates a high likelihood of hazard to wildlife, the program may require additional testing, require that the pesticide be applied only by specially-trained people (restricted use), or decide not to allow its use. In addition, EPA may require monitoring of environmental conditions, such as effects on water sources, or may require additional data from the registrant. Decisions on risk reduction measures are based on a consideration of both pesticide risks and benefits.

The Agency reviews all data to make sure they were developed according to standard practices within the discipline and EPA's test guidelines. Risk assessments are peer reviewed, and regulatory decisions are posted on the Internet for review and comment to ensure that these actions are transparent and stakeholders are engaged in decisions that affect their environment. When complex scientific issues arise, the Agency consults the FIFRA Scientific Advisory Panel (http://www.epa.gov/scipoly/sap/) for independent scientific advice.

*Risk Mitigation*

To ensure unreasonable risks are avoided, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may subsequently require monitoring of environmental conditions, such as effects on water sources or the development and submission of additional laboratory or field study data by the pesticide registrant.

EPA's Pesticide Program has been actively engaged in a number of initiatives to help prevent problems related to the drift of spray and dust from pesticide applications. These initiatives include: broadening the understanding of the science and predictability of pesticide drift based on many new studies; improving the clarity and enforceability of product label use directions and drift restrictions; facilitating the use of drift-reducing application technologies and best management practices to minimize drift; and promoting applicator education and training programs.

*Ensuring Proper Pesticide Use through Labeling*

Under FIFRA, it is illegal to use a registered pesticide in a manner inconsistent with the label instructions and precautions. EPA uses pesticide labels to indicate what uses are appropriate and to ensure that the pesticide is used at the application rates and according to the methods and timing approved as a condition of registration. When EPA registers a pesticide product, it requires specific labeling instructions and precautions. When risks are identified during the initial registration or during registration review, the Agency may mitigate those risks by requiring label changes. For example, EPA may require buffer zones around water sources to prevent contamination of water or endangering aquatic plants and wildlife. Other examples are changing the application method, or rate or timing of applications when pollinators are not present to prevent risks to pollinators such as bees.

*Reducing Risk Through the Use of Safer Pesticides and Methods*

To further protect the environment, the program[76] emphasizes the use of reduced risk methods of pest control, including the use of reduced risk pesticides and helping growers and other pesticide users learn about new, safer products and methods of using pesticides. EPA began promoting reduced risk pesticides in 1993 by giving registration priority to pesticides that have lower toxicity to people and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (http://www.epa.gov/pesticides/ipm/). Biological pesticides and biotechnology often represent lower risk solutions to pest problems.

*Protecting Endangered Species*

EPA is responsible for complying with the ESA. This presents a great challenge given that there are approximately 1,200 active ingredients in more than 17,000 products – many of which have multiple uses – and over 1,600 listed endangered species in the US with diverse biological attributes, habitat requirements, and geographic range,.[77] As part of EPA's determination of whether a pesticide product may be registered for a particular use, the Agency assesses whether listed endangered or threatened species or their designated critical habitat may be affected by use of the product. Where risks are identified, EPA must work with the FWS and the NMFS in a consultation[78] process to ensure these new or existing pesticide registrations also will meet the ESA standard. EPA's Endangered Species Protection Program (ESPP) helps promote the recovery of listed species by determining whether pesticide use in a certain geographic area may affect any listed species. If limitations on pesticide use are necessary to protect listed species in that area, the information is communicated through Endangered Species Protection Bulletins. The goal of this program is to carry out the Agency's responsibilities under FIFRA in compliance with the ESA, without placing unnecessary burdens on agriculture and other pesticide users.

*Minimizing Environmental Impacts through Outreach and Education*

Through public outreach, the Agency continues to encourage the use of Integrated Pest Management (IPM) and other practices to maximize the benefits pesticides can yield while minimizing the impacts on the environment. The Agency develops and disseminates brochures, provides education on potential benefits of IPM, and promotes outreach on the success of IPM to encourage its use.[79] To encourage responsible pesticide use that does not endanger the environment, EPA reaches out to the public through the Internet and to workers and professional pesticide applicators through worker training programs.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in EPA's FY 2018 - 2022 Strategic Plan. In FY2019, EPA's activities will involve increased efforts on

[76] Reducing Pesticide Risk (http://www.epa.gov/pesticides/health/reducing.htm).
[77] https://ecos.fws.gov/ecp0/reports/box-score-report.
[78] For additional information, see https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act.
[79] http://www.epa.gov/pesp/ipminschools/implementation.html.

comprehensive risk assessments to protect the environment. For the 725 cases covering all pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. For each case, the steps in this process include, in this order opening; dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. It is important to open dockets and develop work plans for as many cases as possible early in the process so that there is time to complete the risk assessments and make decisions by the 2022 deadline. The Agency met its obligations for opening dockets and completing work plans so it could now focus its resources on completing risk assessments and making decisions in order to meet the statutory deadline by 2022. EPA completed the opening of all 725 dockets in 2017 and shifted the focus to analysis of these documents in FY 2018. In working towards meeting 2022 deadline for registration review, EPA expects to complete approximately 50 draft risk assessments during FY 2019. The draft risk assessments will be published for public comments.

In FY 2019, as part of the Agency implementation of a Lean Management System, the program, in collaboration with stakeholders, will review business process and procedures to improve results and drive efficiencies while sustaining quality environmental outcomes. Among other efforts, the program will better leverage IT systems, such as PRISM, which will enhance approximately 150 business processes. Over time, similar efforts in other programs have yielded significant results, including up to 40 percent reduction in business process steps or overall reduced burden in delivering environmental benefits.

The review of pesticides currently in the marketplace and implementation of decisions made as a result of these reviews are a necessary element of meeting EPA's goals. However, attaining risk reduction would be significantly hampered without availability of alternative products to these pesticides for consumers. Consequently, the success of the Registration program in ensuring the availability of effective alternative products plays a significant role in meeting the environmental outcome of improved ecosystem protection. EPA also will continue to assist pesticide users in learning about new, safer products and methods for using existing products. The Agency also will continue encouraging the use of IPM tools.

*Protection of Endangered Species*

Under the ESA, federal agencies must ensure that the "actions" they authorize will not result in jeopardy to species listed as endangered or threatened by the Services, or adversely modify designated critical habitat. While EPA authorizes the sale, distribution, and use of pesticides according to the product labeling the Agency also will do more comprehensive risk assessments for registration activities that are protecting endangered species. During registration review, EPA will support obtaining risk mitigation earlier in the process by encouraging registrants to agree to changes in uses and applications of a pesticide that are beneficial to the protection of endangered species prior to completion of EPA's consultations with FWS and NMFS. In FY 2019, pesticide registration reviews are expected to contain comprehensive environmental assessments, including determining potential endangered species impacts. This effort will continue to expand the program's workload due to the necessity of issuing data call-ins and conducting additional environmental assessments for pesticides already in the review pipeline.

In FY 2019, in cooperation with the Services and the United States Department of Agriculture (USDA), the Agency will continue to work toward improving compliance with the ESA. To this end, the Agency continues to consider recommendations from the National Academy of Sciences (NAS) National Research Council regarding scientific and technical issues related to the methods and assumptions used by EPA and the Services to carry out their joint responsibilities under the ESA and FIFRA. The four agencies jointly asked the NAS to identify approaches to: collect the best available scientific data and information; consider sub-lethal, indirect and cumulative effects; assess the effects of chemical mixtures and inert ingredients; use models to assist in analyzing the effects of pesticide use; effectively incorporate uncertainties into the evaluations; and use geospatial information and datasets in the course of these assessments. Since receiving the NAS report, the agencies have developed shared scientific approaches, solicited input from stakeholders, and presented those approaches to stakeholders. During FY 2019, EPA will continue to improve the Biological Evaluations methodology and will apply the revised approaches to selected pesticide risk assessments. These assessments will continue to improve the shared scientific approaches for the Biological Evaluations.

EPA will continue to impose use limitations through appropriate label statements, referring pesticide users to EPA-developed Endangered Species Protection Bulletins, which are available on the Internet via *Bulletins Live Two!*[80] These bulletins also will, as appropriate, contain maps of pesticide use limitation areas necessary to ensure protection of listed species and compliance with the ESA. Any such limitations on a pesticide's use will be enforceable under the misuse provisions of FIFRA. Bulletins are a critical mechanism for ensuring protection of listed species from pesticide applications while minimizing the burden on agriculture and other pesticide users by limiting pesticide use in the smallest geographic area necessary to protect the species. In FY 2019, EPA will continue revising and updating *Bulletins Live Two!* to provide a more interactive and more geographically discrete platform for pesticide users to understand the use limitations necessary to protect endangered or threatened species.

The Agency will continue to provide technical support for compliance with the requirements of the ESA. In FY 2019, EPA will continue the integration of state-of-the-science models, knowledge bases, and analytic processes to increase productivity and better address the challenge of potential risks of specific pesticides to specific species. Interconnection of the various databases within the program office also will provide improved support to the risk assessment process during registration review by allowing risk assessors to more easily analyze complex scenarios relative to endangered species.

*Pollinator Protection*

Bees play a critical role in ensuring the production of food. The USDA is leading the federal government's effort to understand the causes of declining pollinator health and identify actions that also will improve pollinator health. EPA is part of this effort and is focusing on the potential role of pesticides. EPA's emphasis is to ensure that the pesticides used represent acceptable risks to pollinators and that products are available for commercial bee keepers to manage pests that impact pollinator health. EPA is working with pesticide registrants to change pesticide labels to reduce acute exposure and ensure that pollinators are protected.

[80] https://www.epa.gov/endangered-species/endangered-species-protection-bulletins.

EPA implemented a pollinator risk assessment framework to assess the potential effects that pesticides may have on bees through the registration and registration review programs, in cooperation with Canada and the California Department of Pesticide Regulation. In addition, EPA is working with several other federal agencies, including USDA and DOI, to increase and improve pollinator habitat. As a part of these activities, EPA also will continue to assess the effects of pesticides, including neonicotinoids, on bee and other pollinator health and take action as appropriate to protect pollinators, engage state and tribal agencies in the development of pollinator protection plans, and expedite review of registration applications for new products targeting pests harmful to pollinators. EPA also is working with seed companies to develop and implement strategies to reduce the release of pesticide residues during the planting process of treated seed.

Other efforts include working with stakeholders to identify and consolidate Best Management Practices (BMPs) for honey bee health and developing a web page of these BMPs with cooperation from the National Integrated Pest Management Centers and the USDA. EPA is providing funds to land grant universities to conduct research on alternative pest control methods and BMPs that lower risks to bees while effectively controlling pests.

In 2014, EPA required changes to pesticide labels for four neonicotinoid insecticides to limit applications to protect bees, as well as provide users of these products with more precise safety information about bees, improving and clarifying the pollinator protection requirements for 240 approved pesticide labels. These changes were made to the pesticide labels for imidacloprid, thiamethoxam, clothianidin, and dinotefuran. In FY 2019, EPA will continue to require the new pollinator protection labeling for other outdoor foliar products that are acutely toxic and pose risk to bees.[81]

*Protection of Water Resources*

Reduced concentration of pesticides in water sources is an indication of the effectiveness of EPA's risk assessment, management, mitigation, and communication activities. Using monitoring data collected under the U.S. Geological Survey (USGS) National Water Quality Assessment (NWQA) program for urban watersheds, EPA will continue to monitor the impact of our regulatory decisions for three priority chemicals – diazinon, chlorpyrifos, and carbaryl. In agricultural watersheds, the program will monitor the impact of our regulatory decisions on azinphos-methyl and chlorpyrifos and consider whether any additional action is necessary.[82] These four organophosphate insecticides most consistently exceeded EPA's aquatic life benchmarks for aquatic ecosystems[83] during the last ten years of monitoring by the USGS NAWQA program. Overall trends since 2008 have shown reductions in pesticide exceedances due to mitigation implemented by EPA though some limited exceedances have occurred in recent years. In FY 2019, the Agency will continue to work with USGS to develop sampling plans and refine program goals. Water quality is a critical endpoint for measuring exposure and risk to the environment and a measure of EPA's ability to reduce exposure from these key pesticides of concern.

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[81] For additional information on EPA's role in pollinator protection see: http://www2.epa.gov/pollinator-protection/epa-actions-protect-pollinators and http://www2.epa.gov/pollinator-protection/new-labeling-neonicotinoid-pesticides.

[82] Gilliom, R.J., et al. 2006. *The Quality of Our Nation's Waters: Pesticides in the Nation's Streams and Ground Water, 1992–2001*. Reston, Virginia: U.S. Geological Survey Circular 1291, p 171. Available on the Internet at: http://pubs.usgs.gov/circ/2005/1291/.

[83] http://www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm.

The most sensitive aquatic benchmarks for the chemicals are posted on the website: http://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/aquatic-life-benchmarks-pesticide-registration.

**Performance Measure Targets:**

| (091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates). | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 99 | 99 |

| (FIFRA2) Number of FIFRA registration review draft risk assessments completed. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 70 | 72 |

| (FIFRA1) Number of FIFRA decisions completed through pesticides registration review. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 58 | 75 |

| (PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where the original PRIA due date was not met. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 303 | 291 |

| (PRIA1) Average number of days to complete PRIA decisions for new active ingredients. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 643 | 631 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,551.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$8,024.0/ -31.8 FTE) This program change reflects the reduction of funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

**Statutory Authority:**

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Endangered Species Act (ESA).

**Pesticides: Realize the Value of Pesticide Availability**

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$5,554.3*** | ***$6,191.0*** | ***$5,084.0*** | ***-$1,107.0*** |
| Science & Technology | $548.1 | $571.0 | $530.0 | -$41.0 |
| Total Budget Authority | $6,102.4 | $6,762.0 | $5,614.0 | -$1,148.0 |
| Total Workyears | 34.9 | 46.5 | 46.3 | -0.2 |

## Program Project Description:

The primary federal law that governs how EPA oversees pesticide manufacture, distribution and use in the United States is the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Originally enacted in 1947, this law has been significantly amended several times, most recently by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Extension Act of 2012 (or subsequent legislation). FIFRA requires that EPA register pesticides based on a finding that they will not cause unreasonable adverse effects to people and the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide. Each time the law has been amended, while Congress has strengthened the safety standards of the act, it continues to recognize the benefits of pesticides.

This program seeks to realize the value of pesticides that can be used safely to yield many benefits, including: to generate the nation's abundant and wholesome food supply, to protect the public from disease-carrying pests, to protect our environment from the introduction of invasive species from other parts of the world, to kill viruses and bacteria in America's hospitals, and to protect the nation's homes and schools from invasive insects, rodents, molds, and other unwelcome guests.

*Addressing Special Local Needs*

FIFRA Section 24(c), and EPA's implementing regulations give states the authority to issue their own state-specific registrations under certain conditions, while EPA is responsible for overseeing the general program. States may register a new end use product or an additional use of a federally registered pesticide product if the following conditions exist:

- A Special Local Need – an existing or imminent pest problem within a state for which the state lead agency, based on satisfactory supporting information, has determined that an appropriate federally registered pesticide product is not sufficiently available.
- The additional use is covered by any necessary tolerances (maximum legal residue levels) or other clearances under the Federal Food, Drug, and Cosmetic Act (FFDCA).

- Registration for the same use has not previously been denied, disapproved, suspended, or canceled by EPA or voluntarily canceled by the registrant subsequent to issuance of a notice of intent to cancel because of health or environmental concerns.
- Registration is in accord with the purposes of FIFRA.

These 24(c) registrations become federal registrations in 90 days unless EPA objects to them. EPA's role is to ensure that each 24(c) registration meets the requirements of FIFRA.

*Emergency, Quarantine, and Crisis Exemptions*

FIFRA Section 18, and EPA's implementing regulations, authorize EPA, in the event of an emergency, such as a severe pest infestation, to allow an unregistered use of a pesticide for a limited time, if EPA determines that emergency conditions exist which require such an exemption.[84]

An "Emergency Condition" is an urgent, non-routine situation that requires the use of a pesticide(s). Emergency exemptions may be requested by any state or federal agency, but typically come from state lead agricultural agencies. EPA also must establish any necessary tolerances to cover pesticide residues in food, if applicable. Tolerances established for emergency exemption uses are time-limited, corresponding to the time that commodities treated under the exemption might be found in channels of trade. When needed, the program chemistry laboratory evaluates pesticide residues on certain foods. These real-world residue monitoring data can be used to accurately assess the risk and determine whether the acceptable risk level would be exceeded.

A second type of emergency exemption is allowed for "public health" emergencies. A state or federal agency may request a public health emergency exemption to control a pest that will cause a significant risk to human health. The third type of exemption, the "Quarantine" exemption, is allowed to control the introduction or spread of an invasive pest species not previously known to occur in the United States and its territories.

Finally, when the emergency is so immediate that there is not enough time to go through the normal review for an exemption, following communication with clearance by EPA, a state or federal agency may issue a "crisis exemption" allowing the unregistered use to proceed for up to 15 days. During the consultation before the state or federal agency declares a crisis, EPA performs a review to determine whether there are any apparent concerns, and whether the appropriate safety findings required by FIFRA likely may be made. If EPA identifies concerns, the crisis exemption may not be allowed unless those concerns can be resolved.

*Meeting Agriculture's Need for Safe, Effective Pest Control Products*

With the passage of FQPA, Congress acknowledged the importance of and need for "reduced-risk pesticides" and supported expedited agency review to help these pesticides reach the market sooner and replace older and potentially riskier chemicals. The law defines a reduced risk pesticide as one that "may reasonably be expected to accomplish one or more of the following: (1) reduces pesticide

[84] http://www.epa.gov/opprd001/section18/

risks to human health; (2) reduces pesticide risks to non-target organisms; (3) reduces the potential for contamination of valued, environmental resources, or (4) broadens adoption of Integrated Pest Management (IPM)[85] or makes it more effective." EPA developed procedures and guidelines for expedited review of applications for registration or amendments for a reduced risk pesticide. The Agency expanded the reduced risk pesticide program to include consideration of new active ingredients, new uses of active ingredients already deemed to be reduced risk, and amendments to all uses deemed to be reduced risk. EPA gives priority to review of reduced risk pesticides and works with the regulated community and user groups to refine review and registration procedures.

*FIFRA's Version of "Generic" Pesticides*

FIFRA authorizes EPA to register products that are identical to or substantially similar to already registered products (known as "me too" products). Applicants for these substantially similar products may rely on, or "cite" (and offer to pay a fair share for) data already submitted by another registrant. The entry of these new products into the market can cause price reductions resulting from new competition and broader access to products. These price declines generate competition that benefits farmers and other consumers.

*"Minor Crops" – Addressing Growers' Need for Pest Control*

The FQPA amendments made special provisions for minor uses of pesticides. Minor uses of pesticides are defined as uses for which pesticide product sales do not provide sufficient economic incentive to justify the costs of developing and maintaining its registrations with EPA. "Minor" crops include many fruits and vegetables. Minor uses also include use on commercially grown flowers, trees and shrubs, certain applications to major crops such as wheat or corn where the pest problem is not widespread, and many public health applications[86].

Some minor uses have been lost through lack of registrant support during the reregistration process, resulting in grower concerns that adequate pest control tools will no longer be available for many minor crops. The agency works closely with the USDA's Inter-Regional Research Project No. 4 (IR-4)[87] to generate residue data for tolerances on minor crops in order to minimize the burden of data generation for minor uses. EPA and the USDA operate early alert systems to notify growers when a pesticide use for a minor crop is about to be canceled. EPA provides advance public notice of a proposed cancellation to allow time for another registrant to consider maintaining the pesticide use.

*Meeting the Need for Non-agricultural Pesticides*

Farmers are not the only ones who need pesticides. Pest control also is needed in our homes, schools, and workplaces. Pesticides control pests that spread disease like West Nile Virus, malaria and rabies, to name a few. They disinfect our swimming pools and sanitize bathrooms; they combat mold and are essential to sterilize surfaces in hospitals and other health care facilities.

[85] http://www.epa.gov/pesticides/factsheets/ipm.htm
[86] http://www.epa.gov/pesticides/regulating/laws/fqpa/fqpa_accomplishments.htm
[87] http://www.csrees.usda.gov/nea/pest/in_focus/pesticides_if_minor.html

*Outreach and Education*

The Agency will continue to encourage Integrated Pest Management (IPM), which emphasizes minimizing the use of broad spectrum chemicals and maximizing the use of sanitation, biological controls, and selective methods of application, and relies on pesticide users being well-informed about the pest control options available and how to best use them. It is not enough to have pesticide products registered to control pest infestations. Pesticide users need to know which pesticides to use, how to use them, and how to maintain the site, so pests do not return. The Pesticide Program is invested in outreach and training efforts for people who use pesticides and the public in general.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in EPA's FY 2018 – 2022 Strategic Plan. During FY 2019, EPA will review and register new pesticides, new uses for existing pesticides, and act on other registration requests in accordance with FIFRA and FFDCA standards as well as PRIA timeframes. Many of these actions will be for reduced-risk pesticides, which, once registered and used by consumers, will increase benefits to society. Working together with the affected user communities, through IPM and related activities, the Agency plans to accelerate the adoption of these lower-risk products.

EPA will continue to support implementation of other IPM-related activities. The Agency will engage partners in the development of tools and informational brochures to promote IPM efforts and to provide guidance to schools, farmers, other partners, and stakeholders.

Similarly, the Agency will continue its work-sharing efforts with its international partners. Through these collaborative activities and resulting international registrations, international trade barriers will be reduced. When nations with whom we trade accept imported crops treated with newer, lower-risk pesticides, domestic users can more readily adopt these newer pesticides into their crop protection programs. Work-sharing efforts also reduce the costs of registration to governments by sharing the expenses.

In FY 2019, EPA will continue to prioritize emergency exemptions. The economic benefit of the Section 18 emergency exemptions program to growers is the avoidance of losses incurred in the absence of pesticides exempted under FIFRA's emergency exemption provisions.

**Performance Measure Targets:**

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$74.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$1,033.0) This program change reflects a reduction in funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees. This reduction recognizes the adoption of some process improvements in the registration and registration review processes and the completion of some upgrades to program IT systems.

**Statutory Authority:**

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA), §408.

**Science Policy and Biotechnology**
Program Area: Pesticides Licensing
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$1,210.0*** | ***$1,479.0*** | ***$0.0*** | ***-$1,479.0*** |
| Total Budget Authority | $1,210.0 | $1,479.0 | $0.0 | -$1,479.0 |
| Total Workyears | 5.1 | 5.4 | 0.0 | -5.4 |

**Program Project Description:**

The Science Policy and Biotechnology program provides scientific and policy expertise, coordinates EPA's intra/interagency efforts, and facilitates information-sharing related to core science policy issues concerning pesticides and toxic chemicals. In addition, the Science Policy and Biotechnology program provides for independent, external scientific peer review through the Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel (FIFRA SAP), a federal advisory committee and the newly-formed Science Advisory Committee on Chemicals (SACC).

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. Statutory requirements will be absorbed by the pesticides and toxics programs.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,479.0/ -5.4 FTE) This program change eliminates the Science Policy and Biotechnology program. The science advisory committee oversight, including peer review, required by FIFRA and TSCA, will be conducted by the pesticides and toxics program offices.

**Statutory Authority:**

Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetics Act (FFDCA), §408; Toxic Substances Control Act.

# Resource Conservation and Recovery Act (RCRA)

**RCRA: Corrective Action**

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$36,129.6*** | ***$36,584.0*** | ***$31,944.0*** | ***-$4,640.0*** |
| Total Budget Authority | $36,129.6 | $36,584.0 | $31,944.0 | -$4,640.0 |
| Total Workyears | 204.7 | 205.4 | 172.0 | -33.4 |

## Program Project Description:

To reduce risks from exposure to toxics, EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action program ensures that contaminated facilities subject to RCRA are cleaned up by the responsible party, returns contaminated property to productive use, and keeps costs from being transferred to the largely taxpayer-funded Superfund program. Pursuant to EPA promulgated regulations and administrative orders under RCRA, EPA will continue to direct financial assurance funds set aside by members of the regulated community to ensure that the funds are used to meet regulated entities' obligations and to protect taxpayers from having to pay the bill. Approximately 111 million Americans live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population),[88] and the total area covered by these corrective action sites is approximately 18 million acres.[89]

EPA works in close partnership with 44 states and one territory authorized to implement the Corrective Action program[90] to ensure that cleanups are protective of human health and the environment. The Corrective Action program allows for the return of properties to beneficial use, which benefits the surrounding communities, reduces liabilities for facilities, and allows facilities to redirect resources to productive activites. The Agency provides program direction, leadership, and support to its state partners. This includes specialized technical and program expertise, policy development for effective program management, national program priority setting, measurement and tracking, training and technical tools, and data collection/management/documentation. In addition, through worksharing, the Agency serves as lead or support for a significant number of complex and challenging cleanups in both non-authorized and authorized states.

## FY 2019 Activities and Performance Plan:

[88] U.S. EPA, Office of Land and Emergency Response Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016 from RCRAInfo; and (2) census data from the 2011-2013 American Community Survey.
[89] As compiled by RCRAInfo.
[90] State implementation of the Corrective Action program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching state contributions.

Work in this program directly supports Goal 1/ Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. The program focuses its resources on cleaning up 3,779 priority contaminated facilities (the "2020 Baseline"), which includes highly contaminated and technically challenging sites. Currently, only 32 percent of the 2020 Baseline facilities have completed final and permanent cleanups, leaving over 2,500 facilities still needing oversight and technical support to reach final site-wide cleanup objectives. Additionally, the 2020 Baseline is a subset of a larger group of facilities with potential corrective action obligations under the RCRA. The program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the 2020 Baseline facilities, and assess and cleanup identified non-2020 Baseline facilities.

In FY 2019, EPA will:

- Prioritize and focus resources on those facilities that present the highest risk to human health and the environment and implement actions to end or reduce these threats.

- Provide technical assistance to authorized states in the areas of site characterization, sampling, remedy selection, and long-term stewardship at 2020 Baseline facilities.

- Prioritize and focus the program on completing site investigations to identify the most significant threats, establish interim remedies to reduce and eliminate exposure, and select and construct safe, effective long-term remedies that maintain the economic viability of the operating facility.

- For high priority facilities, perform cleanup work under work-sharing agreements to assist with facilities that have complex issues[91] or special tasks (*e.g*, ecological risk assessments).

- Continue to improve cleanup approaches and share best practices and cleanup innovations, such as the use of the Lean RCRA FIRST[92] toolbox developed to speed up and improve cleanups by eliminating inefficiencies in key procedural steps.

- Maintain RCRAInfo, which is the primary data system that many states rely upon to manage their RCRA permitting, corrective action, and hazardous waste generator programs. RCRAInfo receives data from hazardous waste handlers for the National Biennial RCRA Hazardous Waste Report, which is mandated by RCRA Sections 3002 and 3004. The last biennial report showed there were 26,284 generators of over 33 million tons of hazardous waste. RCRAInfo provides the only national-level RCRA hazardous waste data and statistics to track the environmental progress of approximately 20,000 hazardous waste units at 6,600 facilities.

[91] For example, vapor intrusion, wetlands contamination, or extensive groundwater issues.
[92] For more information, visit: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

**Performance Measure Targets:**

| (CA2) Percentage of RCRA corrective action facilities with migration of contaminated groundwater under control. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 88 | 89 |

| (CA1) Percentage of RCRA corrective action facilities with human exposures to toxins under control. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 94 | 95 |

| (CA5) Percentage of RCRA corrective action facilities with final remedies constructed. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 70 | 71 |

| (CA6) Percentage of RCRA corrective action facilities with corrective action performance standards attained. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 33 | 34 |

| (RSRAU) Number of RCRA corrective action facilities made ready for anticipated use. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 75 | 91 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$901.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5,541.0/ -33.4 FTE) This program change modifies the timeline for initiating cleanups and ongoing cleanups. EPA will prioritize resources on those facilities that present the highest risk to human health and the environment.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), §§ 3004, 3005, 8001.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$58,277.0*** | ***$58,439.0*** | ***$41,907.0*** | ***-$16,532.0*** |
| Hazardous Waste Electronic Manifest System Fund | $4,915.4 | $3,156.0 | $0.0 | -$3,156.0 |
| Total Budget Authority | $63,192.4 | $61,595.0 | $41,907.0 | -$19,688.0 |
| Total Workyears | 310.2 | 333.7 | 213.2 | -120.5 |

## Program Project Description:

The Resource Conservation and Recovery Act (RCRA), established EPA's role as a federal leader in the conservation and recovery of resources. Under RCRA, EPA sets national standards for managing hazardous wastes and provides federal agencies, state, tribal, and local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation. Approximately 60,000 facilities generate and safely manage hazardous waste in the United States.[93] Eighty percent of the U.S. population lives within three miles of one of these facilities,[94] making national standards and procedures for managing hazardous wastes a necessity.

The Waste Management program safeguards the American people while facilitating commerce by supporting an effective waste management infrastructure. Cradle-to-grave hazardous waste management regulations help ensure safe management practices through the entire process of generation, transportation, recycling, treatment, storage, and final disposal. The program increases the capacity for proper hazardous waste management in states by providing grant funding and technical support.

EPA and its state partners issue, update, maintain, and oversee RCRA controls for approximately 20,000 hazardous waste units (*e.g.*, incinerators, landfills, and tanks) located at 6,600 treatment, storage, and disposal facilities.[95] Just as businesses innovate and grow, the waste management challenges they face also evolve; this requires new direction and changes in the federal hazardous waste program through updated regulations, guidance, and other tools.

EPA directly implements the entire RCRA program in Iowa and Alaska and provides leadership, work-sharing, and support to the states and territories authorized to implement the permitting

[93] Memorandum, February 18, 2014, from Industrial Economics to EPA, Re: Analysis to Support Assessment of Economic Impacts and Benefits under RCRA Programs: Key Scoping Assessment, Initial Findings and Summary of Available Data (Section 1), pages 5-11.
[94] U.S. EPA, Office of Solid Waste and Emergency Response Estimate. 2014. Data collected includes: (1) site information as of the end of FY 2011 from RCRAInfo; and (2) census data from the 2007-2011 American Community Survey.
[95] As compiled by RCRAInfo.

program. Additionally, the Toxic Substances Control Act polychlorinated biphenyls (PCB) cleanup and disposal program is implemented under the Waste Management program to reduce PCB exposure from improper disposal, storage, and spills. The program reviews and approves PCB cleanup, storage, and disposal activities. This federal authority is not delegated to state programs. PCBs were banned in 1979, but legacy use and contamination still exists, and can still be released into the environment from poorly maintained hazardous waste sites that contain them.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the RCRA Waste Management program will:

- Provide technical assistance to regions, states, and tribes regarding the development and implementation of solid waste programs.

- Provide technical and implementation assistance, oversight, and support to facilities that generate, treat, store, recycle and dispose of hazardous waste.

- Review and approve PCB cleanup, storage, and disposal activities to reduce exposures, particularly in sensitive areas like schools and other public spaces. EPA will prioritize PCB cleanup approvals and expedite high priority cleanups or address those unaddressed in a timely fashion. Issuing PCB approvals is a federal responsibility, non-delegable to states.

- Managing the Waste Import Export Tracking System (WIETS) system, which provides for the electronic submission of hazardous waste import and export notices. This saves businesses time and effort and makes shipping hazardous waste across borders more efficient. Managing hazardous waste imports and exports is a federal responsibility, nondelegable to states.

- Provide technical hazardous waste management assistance to tribes to encourage sustainable practices and reduce exposure to toxins from hazardous waste.[96]

- Directly implement the RCRA program in unauthorized states, on tribal lands, and other unauthorized portions of state RCRA programs. Issue and update permits, including continuing to improve permitting processes.

- Implement regulations to ensure protective management of coal combustion residuals (CCR). In response to historic management practices, the Agency has promulgated regulations specifying improved management and disposal practices to ensure people and ecosystems are protected. The Agency will continue to work with our stakeholders through technical assistance and guidance.

[96] Of the 567 federally recognized tribes, as of September 30, 2016, 224 have an integrated waste management plan.

- Implement applicable provisions of the Water Infrastructure Improvements for the Nation Act of 2016, which enables states to submit for EPA approval state CCR permit programs. The Agency will continue to work closely with state partners to review and make determinations on State programs. Subject to appropriations, EPA will implement a permit program for CCR disposal facilities on tribal lands as well as participating states.

**Performance Measure Targets:**

| **(HW4) Percentage of hazardous waste units with initial controls in place to prevent release.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 45 | 48 |

| **(HW5) Number of renewals or clean-closures at permitted hazardous waste facilities.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 64 | 64 |

| **(PCB) Number of approvals issued for polychlorinated biphenyl (PCB) cleanup, storage and disposal activities.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 160 | 160 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$2,126.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$18,658.0/ -122.6 FTE) This program change reflects a focus on PCB cleanup and hazardous waste disposal programs, while reducing technical assistance to stakeholders regarding the development and implementation of solid waste management programs.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), §§ 3004, 3005, 3024, 8001; Toxic Substances Control Act (TSCA), § 6.

## RCRA: Waste Minimization & Recycling

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$9,254.1*** | ***$9,141.0*** | ***$0.0*** | ***-$9,141.0*** |
| Total Budget Authority | $9,254.1 | $9,141.0 | $0.0 | -$9,141.0 |
| Total Workyears | 50.6 | 51.0 | 0.0 | -51.0 |

**Program Project Description:**

The Resource Conservation and Recovery Act (RCRA) established EPA's role as a federal leader in the conservation and recovery of material. Charged to provide federal agencies, state, local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation, EPA established the RCRA Waste Minimization program.

Through the RCRA Waste Minimization program, EPA collects, maintains, and shares information on the market potential of energy and materials recovered from solid waste, including information regarding the savings potential of conserving resources that go into the waste stream.[97] As a result, industries are able to more efficiently conserve virgin resources, including natural resources, fossil fuels, minerals, and precious metals.

Efforts in Sustainable Materials Management (SMM) seeks to efficiently and effectively minimize environmental impacts throughout the full life cycle of materials—from raw materials extraction, through transportation, processing, manufacturing, and use, as well as reuse, recycling, and disposal. This approach highlights ways to reduce waste throughout the life-cycle and to use waste materials as commodities to grow industries and associated jobs.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been proposed for elimination for this program in FY 2019. State and local entities or industry groups may elect to continue promote reuse and recycling of materials based on previous work supported by the program.

**Performance Measure Targets:**

The proposed disinvestment means that the Agency will no longer publish measures associated with this program.

[97] For additional information, refer to: https://www.epa.gov/smm.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$9,141.0/ -51.0 FTE) This funding change proposes to eliminate the RCRA Waste Minimization and Recycling program in FY 2019. EPA will focus on core waste management work.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA).

# Toxics Risk Review and Prevention

**Toxic Substances: Chemical Risk Review and Reduction**

Program Area: Toxics Risk Review and Prevention

Goal: Core Mission

Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$64,329.5*** | ***$58,995.0*** | ***$58,626.0*** | ***-$369.0*** |
| Total Budget Authority | $64,329.5 | $58,995.0 | $58,626.0 | -$369.0 |
| Total Workyears | 255.5 | 238.7 | 238.7 | 0.0 |

## Program Project Description:

Under the Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, EPA has significant responsibilities for ensuring that chemicals in or entering commerce do not present unreasonable risks to human health or the environment. These responsibilities are executed by the Agency through the Chemical Risk Review and Reduction (CRRR) Program, which works to ensure the safety of:

- Existing chemicals (those already in use when TSCA was first enacted in 1976 and those which have gone through review by the TSCA New Chemicals Program since),[98] by obtaining and evaluating chemical data and by taking regulatory action, where appropriate, to prevent any unreasonable risk posed by their use; and

- New chemicals by reviewing and taking action on new chemical notices submitted by industry, including Pre-Manufacture Notices (PMNs), to ensure that no unreasonable risk will be posed by such chemicals upon their entry into U.S. commerce.

The new law, signed on June 22, 2016, substantially amended TSCA by providing EPA with significant new authorities and obligations:

- *Clear and enforceable deadlines.* EPA is now required to systematically prioritize and evaluate existing chemicals on a specific schedule, complete specified numbers of chemical risk evaluations within specified time frames, complete risk management actions within specified time frames where warranted by the findings of the evaluations, and review and make determinations on Confidential Business Information (CBI) claims within specified time frames, among other actions.

[98] These include certain prevalent, high-risk chemicals known generally as "legacy chemicals" (e.g., PCBs, mercury), which were previously covered in a separate Chemical Risk Management (CRM) budget justification. The CRM program area was combined with Chemical Risk Review and Reduction effective FY 2015.

- *Requirement to address risks.* EPA is required to take timely action to address risks identified in the risk evaluations by applying by rule one or more of the requirements specified in TSCA Section 6(a), which can include: prohibiting or otherwise restricting the manufacture, processing or distribution in commerce of the chemical substance or mixture for a particular use; limiting the amount of the substance or mixture that may be manufactured, processed or distributed in commerce for a particular use; or imposing requirements affecting labeling, recordkeeping or any manner of method of commercial use or disposal of the substance or mixture; to the extent necessary so that the chemical will no longer present an unreasonable risk.

- *Increased transparency of chemical data while protecting legitimate confidential information.* EPA is required to review all chemical identity Confidential Business Information (CBI) claims for certain types of submissions and for 25 percent of most other CBI claims within 90 days of receipt.

- *Requirement that EPA make an affirmative determination of safety on every new chemical.* Previously, new chemicals were reviewed in 90 days and were allowed to enter the marketplace unless EPA made a specific determination that regulatory controls were needed. Now, continuing with a mandated 90-day timeframe, an affirmative determination must be made by EPA that a new chemical substance will present, may present, or is not likely to present an unreasonable risk to human health or the environment; or that the available information is insufficient to enable the Agency to make any of the above determinations. Unless EPA determines that the substance is not likely to present unreasonable risk, the Agency must issue an order or rule that imposes conditions sufficient to protect against any such unreasonable risk before the chemical can enter the marketplace.

In addition, the Act provided a sustainable source of funding for EPA to carry out its new responsibilities. The Agency will now be able to collect user fees from chemical manufacturers and processers to defray up to 25 percent of its costs for administering certain sections[99] of TSCA, as amended.[100] Fee levels may be adjusted on a recurring three-year basis for inflation and to ensure that fees are sufficient to defray up to 25 percent of the costs to carry out certain sections of TSCA, as amended.

A rule to implement the fee collection provisions of the new law will become effective and allow EPA to begin collecting fees in FY 2019. The statute authorizes EPA to collect fees from chemical manufacturers (including importers) and processors who:

- Are required to submit test data (TSCA section 4);
- Submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (TSCA section 5);

[99] The costs of implementing TSCA (as amended) Sections 4, 5 and 6 are defrayable up to the statutory caps, as are the costs of collecting, processing, reviewing and providing access to and protecting from disclosure, as appropriate, chemical information under Section 14.

[100] The authority to assess fees is conditioned on appropriations for the CRRR Program, excluding fees, being held at least equal to the amount appropriated for FY 2014.

- Manufacture or process a chemical substance that is subject to a risk evaluation (TSCA section 6); or
- Request that EPA conduct risk evaluation on an existing chemical (TSCA section 6), subject to the Agency's approval of the request.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the resources requested by EPA will support continued implementation of the new TSCA law, with emphasis on the critical mandates and timelines applicable to chemical testing, pre-market review of new chemicals, chemical risk evaluation and management, review and determinations on incoming CBI claims and other statutory priorities. At the same time, the Agency will continue to carry out ongoing base program activities.

To monitor and evaluate its progress on critical implementation activities, EPA has developed and included in its FY 2018-2022 Strategic Plan three strategic measures and targets establishing ambitious five-year performance goals. The Agency will use these metrics to determine whether it is carrying out its core responsibilities under the new law in a timely manner. Through FY 2022, EPA expects to complete all EPA-initiated risk evaluations and all associated risk management actions for existing chemicals within statutory timelines. In addition, EPA plans to ramp up its performance on reviewing new chemical notifications so that by FY 2022, EPA will be making all final determinations within 180 days of receipt. EPA will maintain corresponding annual performance measures and two-year Agency Priority Goals to keep track of its progress on a year-to-year basis.

The Agency has already made considerable progress in carrying out work activities required under the new law. Key achievements include:

- Commencing risk evaluations for an initial set of 10 priority chemicals and issuing scoping documents on schedule;
- Finalizing several key framework rules needed to carry out provisions of the new TSCA law (Inventory Rule, Risk Evaluation Process Rule, Prioritization Process Rule);
- Releasing guidance for external parties interested in submitting draft risk evaluations to EPA for consideration;
- Completing reviews under the new law of more than 1,150 new chemical notifications[101];
- Eliminating a backlog of more than 300 new chemical submissions that required re-review under the new law;
- Publishing a list of five mercury compounds that are to be made subject to export restrictions; and
- Conducting a series of public meetings and webinars to gather public input on TSCA implementation activities.

Future implementation activities will build on the progress EPA has already made.

[101]See https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review#chart.

*Primary TSCA Implementation Activities – TSCA Sections 4, 5, 6, 8 and 14*

The new law, amending several elements of TSCA, provided mandates and authorities to EPA for implementation responsibilities in the following primary areas: mandatory requirement for EPA to evaluate and manage existing chemicals with clear and enforceable deadlines; ; new requirement that EPA must make an affirmative finding on the safety of a new chemical or significant new use of an existing chemical before it is allowed to be commercialized; and increased public transparency for chemical information. This section describes activities associated with these primary mandates and authorities.

Under TSCA Section 5, as amended, EPA is responsible for reviewing all new chemical submissions to determine whether the chemicals may pose unreasonable risk to human health or the environment if they were to enter U.S. commerce, and, when necessary, require restrictions or testing prior to being allowed to be commercialized. Each year, EPA assesses and manages, as necessary, the potential risks from approximately thousand new chemicals, including nanoscale materials and products of biotechnology, prior to their entry into the marketplace.

The law's new requirements made significant changes to the new chemical review process. The new law requires that an affirmative determination be made by EPA on whether or not a new chemical substance will present, may present, or is not likely to present an unreasonable risk (or that available information is insufficient to enable any of these determinations to be made) before the chemical substance can proceed to the marketplace. Since enactment, the program has been developing and implementing a process for administering affirmative determinations for both intended and reasonably foreseen uses of new chemicals as well as findings of "insufficient information to make a reasoned evaluation." As a result, the workload involved in new chemical review has increased.

In FY 2019, the Agency expects to review over one thousand new chemical submissions, take appropriate testing and risk management actions, including orders and Significant New Use Rules (SNURS) where appropriate, and make affirmative determinations. The program also will evaluate the data submitted under requirements of Section 5 Consent Orders and address the Notices of Commencement (NOCs) submitted when a new chemical enters commerce. In FY 2019, the Agency will continue to effectuate improvements to internal data and tracking systems to address the new mandates under TSCA as amended.

Under TSCA Section 6, as amended, EPA is required to maintain an ambitious schedule for initiating and completing chemical risk evaluations of existing chemicals. Where risks are identified, timelines are delineated for initiating and completing regulatory actions to address those risks.

- *Risk Evaluations*: On December 19, 2016, EPA identified the first 10 chemicals to undergo risk evaluation under the new law (Designation of Ten Chemical Substances for Initial Risk Evaluations Under the Toxic Substances Control Act, 81 FR 91927), triggering a statutory deadline to issue documents identifying the scope of those evaluations within six months and to complete the risk evaluations within three years. Scoping documents for all

10 evaluations were released by EPA in June 2017. In FY 2019, the Agency will be working to advance these risk evaluations through the draft, peer review/public comment and final stages, with a goal of completion no later than December 2019.

For EPA-initiated risk evaluations beyond the first 10 chemicals noted above, EPA must establish and implement a risk-based prioritization process to determine which chemicals will be evaluated, identifying them as either "high" or "low" priority substances as set forth in TSCA section 6(b)(1)(A). A high priority designation is required when EPA determines, without consideration of cost or other non-risk factors, that the chemical may present an unreasonable risk of injury to health or the environment due to potential hazard and a route of exposure, including to susceptible subpopulations [TSCA section 6(b)(1)(B)]. High priority designation triggers a requirement that EPA conduct a risk evaluation to determine whether a chemical substance presents an unreasonable risk of injury to health or the environment, without consideration of costs or other non-risk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulations [TSCA section 6(b)(4)(F)]. The statute also expands the scope of EPA's risk evaluations to include conditions of use of the chemical intended, known, or reasonably foreseen and requires that they be completed within 3 years (with a possibility of 6-month extension) [TSCA section 6(b)(4)(G)].

EPA is required to begin a risk evaluation for another chemical each time a risk evaluation is completed such that EPA maintains the pace of 20 EPA-initiated risk evaluations underway from the end of calendar year 2019 forward [TSCA section 6(b)(2)]. The law also directs the Agency to designate at least 20 chemicals, by the end of calendar year 2019, as low-priority substances, for which risk evaluation is not warranted at this time; in FY 2019, the Agency will be working to finalize the identification of these low-priority substances.

The law includes provisions allowing manufacturers to request EPA to conduct evaluations of specific chemicals. EPA is required to undertake manufacturer-requested risk evaluations that meet the Agency's acceptance criteria at levels up to 50 percent of the number of EPA-initiated evaluations underway.

- *Risk Management Actions:* When unreasonable risks are identified through the risk evaluations, EPA must finalize risk management actions to address the unreasonable risk within two years, or up to four years if an extension is needed. Costs and availability of alternatives will be considered when determining appropriate action to address risks. Implementation must begin as quickly as possible, but no later than five years after the final regulation in cases of bans or phase-outs of chemicals.

TSCA Section 6(h), establishes a fast-track process to address certain persistent, bioaccumulative, and toxic (PBT) chemicals on the 2014 TSCA Work Plan. For these chemicals, unless a manufacturer requests that they undergo a risk evaluation, a risk evaluation is not required, and action to reduce exposure to the extent practicable must be proposed no later than three years after enactment of the Lautenberg amendments (by June 2019) and finalized 18 months later. EPA determined that seven chemicals met the PBT criteria set forth in the new law and subsequently

received a request that two be evaluated under TSCA section 6. Risk evaluations for these two chemicals will begin after the Fees rule becomes effective. EPA is continuing efforts to assess exposure and use, in order to address any risks identified for the five remaining PBT chemicals within the prescribed period mandated by the law.

The Agency typically receives and analyzes about 300 Substantial Risk Notifications submitted by industry annually pursuant to Section 8(e), which requires EPA be notified immediately when a company learns that a substance or mixture presents a substantial risk of injury to health or the environment. EPA may use the information it receives in 8(e) notices in determining whether to take further action.

TSCA Section 4, as amended, authorizes EPA to require testing of a chemical substance or mixture by manufacturers (including importers). The 2016 TSCA amendments provided new test order and consent agreement authorities which are designed to expedite the Agency's collection of testing information for prioritizing and conducting chemical risk evaluations for new and existing chemicals. In FY 2019, EPA may utilize these authorities to require testing on chemicals in connection with the prioritization and risk evaluation processes, where such testing is needed. The Agency will continue to review test data submitted from prior test rules, enforceable consent agreements and test orders. As in past years, EPA will make use of Toxics Release Inventory (TRI) data in prioritizing chemicals for collection of testing information and evaluation of potential risks.

TSCA Section 4, as amended, also promotes the use of non-animal alternative testing methodologies. The Agency will publish an Alternative Testing Methods Strategy by June 2018, two years after the date of enactment, as required by the new law, and begin implementing the strategy moving forward with implementation of the amended TSCA.

In addition, in FY 2019, EPA will continue to issue Significant New Use Rules (SNURs) for existing chemicals where applicable. The Agency has the authority to monitor and control significant new uses of existing chemical substances where such uses are no longer ongoing. With a notification of a new use, the Agency initiates an evaluation focusing on the health and environmental effects of the substance's significant new use.

Under Section 8 of TSCA, as amended, EPA is required to designate chemical substances on the TSCA Chemical Substance Inventory as either "active" or "inactive" in U.S. commerce. To facilitate this, EPA, as required by law, promulgated a rule one year after enactment requiring industry to report chemical substances on the TSCA Inventory that were manufactured (including any that were imported) for non-exempt commercial purposes during the ten-year time period prior to enactment. Reporting began during the last quarter of FY 2017, with a 180-day timeline for manufacturers, followed by additional time for processors. EPA will use notices received to identify reported substances as active on the TSCA Inventory. Substances for which no notices are received will be identified as inactive on the Inventory. EPA expects to publish the first TSCA Inventory with active and inactive designations by the first quarter of FY 2019.

Section 8 of TSCA, as amended, also requires both manufacturers and processors to notify EPA in the future when they anticipate re-introducing into U.S. commerce substances listed as inactive

on the TSCA Inventory. This future reporting will commence after the publication of the TSCA Inventory with active and inactive designations.
TSCA Section 14, as amended, makes significant changes to the CBI process. It establishes new substantiation requirements for certain types of confidentiality (CBI) claims from submitters, requires EPA to review and make determinations on most new CBI claims for the identity of chemicals and a subset of other types of CBI claims, directs EPA to develop policies and procedures for sharing TSCA CBI with states, tribes, health and medical professionals, first responders and others; requires EPA to review CBI claims for chemical identity relating to active chemical substances in commerce to determine if they are still warranted; and directs EPA to establish guidance for structurally descriptive generic names that must be provided when specific chemical identity is claimed as CBI. In addition, any CBI claim made for a chemical identity by manufacturers or processors during reporting to establish the active TSCA Inventory must be reviewed and determinations made no later than five years after the establishment of the active inventory listing. In FY 2019, in follow-up to the initial list of the active inventory, the Agency will finalize a rule on a plan to review claims to protect chemical identities. The current Inventory has over 17 thousand chemicals on the confidential portion. In order to comply with these new provisions, EPA is developing new or enhanced information systems to accommodate tracking of CBI reviews and changes to electronic reporting applications.

*Other TSCA Mandates and Activities*

In April 2017, as required under Section 8 of TSCA, as amended, EPA published in the Federal Register an inventory of supply, use and trade of mercury and mercury compounds in the U.S., to be updated every three years. EPA expects to be engaged in this process during FY 2019. In addition, by June 2018, the Agency must promulgate a rule establishing reporting requirements for persons who manufacture or import mercury and mercury-added products, or intentionally use mercury in a manufacturing process. In FY 2019, EPA will complete and maintain an electronic reporting interface and database within the Central Data Exchange (CDX), EPA's electronic reporting system, and conduct outreach to instruct potentially affected stakeholders on how to report required information.

The Mercury Export Ban Act prohibits the export of certain specific mercury compounds. Section 12 of TSCA, as amended, directs EPA to publish a list of additional mercury compounds that will be subject to export bans. The Agency completed this step in 2016. Every five years, the Agency also must submit a report to Congress addressing any continuing export of those mercury compounds, with recommendations as to whether further regulation is warranted.

Section 21 of TSCA, as amended, authorizes citizen petitions for the issuance, amendment or repeal of certain actions (rules and orders) promulgated under TSCA: §4 (rules and orders requiring chemical testing); §6 (rules imposing risk mitigation controls on chemicals); §8 (rules requiring submission of information); §5 (orders affecting new chemical substances). Since September 2007, 22 citizen petitions have been filed with EPA under this authority. The Agency must grant or deny a Section 21 petition within 90 days; if EPA grants a petition, the requested action must be initiated in a timely fashion.

*Other Business Lines in Support of TSCA Implementation*

- Continuing enhancement of the TSCA Chemical Information System (CIS) to reduce manual handling of data, increase internal EPA access to data relevant to chemical assessments and expedite review of chemicals;

- Continuing integration of TSCA information management, e-Reporting and public access systems with the Agency's E-Enterprise business strategy, leveraging the E-Enterprise portal to provide better customer service for external users;

- Developing new tools for hazard and exposure identification assessment and characterization, while improving existing tools to better assess risks from both new and existing chemicals

- Maintaining and enhancing the functionality of ChemView and expanding the information it makes available to the public to include newly completed chemical assessments, as well as other new data reported to EPA under TSCA (e.g., Section 5 Pre-manufacture Notices (PMNs), Section 12(b) data, and Section 8 (d), 8(e), and 8(c) submissions).

In FY 2019, the Agency will continue implementation of required TSCA activities not affected by the Frank R. Lautenberg Chemical Safety for the 21st Century Act amendments. These activities include:

- Implementing regulations under the TSCA Title VI Formaldehyde Standards for Composite Wood Products Act (Public Law 111-199). Title VI establishes national emission standards for formaldehyde in new composite wood products; [102]

- Continuing to implement the Mercury Export Ban Act (MEBA);[103] and providing responses to any requests for exemption from applicable export prohibitions. Continuing to carry out work necessary to support compliance with the Minimata Convention on Mercury, to which the U.S. is a party.

- Providing firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts, as well as provide for operation and maintenance of the online database (FLPP)[104] that supports the processing of applications for training providers, firms and individuals.

**Performance Measure Targets:**

| **(TSCA3) Percent of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within statutory timelines.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 65 | 80 |

[102] See http://www2.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products.
[103] MEBA prohibits the export of elemental mercury as of January 1, 2013, among other requirements for EPA, DOE, and other federal agencies.
[104] See https://ssoprod.epa.gov/sso/jsp/flppLogin.jsp.

| (TSCA2) Number of TSCA risk management actions for existing chemicals completed within statutory timelines. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | No Target Established | 5 |

| (TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | No Target Established | 1 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$381.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$8,180.0/ -51.6 FTE) This program change shifts funding for 51.6 FTE from annual appropriations to new TSCA user fee collections. Fee collections are expected to begin in quarter one of FY 2019.

- (+51.6 FTE) This program change shifts 51.6 FTE to new TSCA fee collections from annual appropriations.

- (-$315.0/ -2.0 FTE) This realignment of FTE from appropriated Chemical Risk Review and Reduction FTE to TSCA user fee collections results in a decrease of 2.0 FTE with associated payroll of $315.0. Resources have been realigned to the Office of Research and Development's Chemical Safety and Sustainability research program's Computational Toxicology (CompTox) program to support risk assessment and evaluation science that is needed to address new TSCA requirements.

- (+$7,745.0/ +2.0 FTE) This program change provides funding to support implementation of new responsibilities required by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. This change also provides minimal resources and FTE to continue certain activities from the Lead-based paint program. This includes associated payroll of $315.0.

**Statutory Authority:**

Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act (enacted June 2016).

**Endocrine Disruptors**
Program Area: Toxics Risk Review and Prevention
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$6,006.4*** | ***$7,502.0*** | ***$0.0*** | ***-$7,502.0*** |
| Total Budget Authority | $6,006.4 | $7,502.0 | $0.0 | -$7,502.0 |
| Total Workyears | 6.6 | 8.9 | 0.0 | -8.9 |

**Program Project Description:**

The Endocrine Disruptor Screening Program (EDSP) was established in 1996 under authorities contained in the Federal Food, Drug and Cosmetic Act (FFDCA) and the Safe Drinking Water Act (SDWA) amendments. Current activities within the EDSP include transitioning to the use of high throughput screening (HTS) and computational toxicology (CompTox) tools to screen thousands of chemicals for endocrine activity, establishing policies and procedures for screening and testing, and evaluating data to ensure chemical safety by protecting public health and the environment from endocrine disrupting chemicals.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. EPA will absorb the remaining functions within the pesticides program using the currently available tiered testing battery.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$7,502.0/ -8.9 FTE) This program change eliminates the Endocrine Disruptors program. The ongoing functions of the program can be absorbed into the pesticides program.

**Statutory Authority:**

Federal Food Drug and Cosmetic Act (FFDCA), § 408(p); Safe Drinking Water Act (SDWA), § 1457.

**Pollution Prevention Program**
Program Area: Toxics Risk Review and Prevention
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$11,338.1*** | ***$12,194.0*** | ***$0.0*** | ***-$12,194.0*** |
| Total Budget Authority | $11,338.1 | $12,194.0 | $0.0 | -$12,194.0 |
| Total Workyears | 45.9 | 58.1 | 0.0 | -58.1 |

**Program Project Description:**

The Pollution Prevention (P2) program is a tool for advancing environmental stewardship and sustainability by federal, state and tribal governments; businesses; communities and individuals. The P2 program seeks to alleviate environmental problems by achieving reductions in the generation of hazardous releases to air, water, and land; reductions in the use of hazardous materials; reductions in the generation of greenhouse gases; and reductions in the use of water. The P2 program also helps businesses and others reduce costs as a result of implementing these preventative approaches.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. Based on previous investments in P2 solutions made under this program project, partners are expected to be able to continue to share best practices and pursue additional pollution prevention solutions.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$12,194.0/ -58.1 FTE) This program change eliminates the Pollution Prevention program.

**Statutory Authority:**

Pollution Prevention Act of 1990 (PPA), §§ 6602-6610; Toxic Substances Control Act (TSCA), § 10.

**Toxic Substances: Lead Risk Reduction Program**
Program Area: Toxics Risk Review and Prevention
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$12,780.9*** | ***$13,203.0*** | ***$0.0*** | ***-$13,203.0*** |
| Total Budget Authority | $12,780.9 | $13,203.0 | $0.0 | -$13,203.0 |
| Total Workyears | 68.7 | 72.8 | 0.0 | -72.8 |

**Program Project Description:**

EPA is working to reduce the number of children with blood lead levels of five micrograms per deciliter or higher through multiple programs.[105] The Lead Risk Reduction program also has worked to reduce the disparities in blood lead levels between low-income children and non-low-income children.[106]

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. Lead paint certifications will continue under Chemical Risk Review Reduction program. Other forms of lead exposure are addressed through other targeted programs such as lead pipe replacement with the SRFs.

EPA will continue to provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts, as well as provide for operation and maintenance of the online database (FLPP) that supports the processing of applications for training providers, firms and individuals, through the Chemical Risk Review and Reduction program.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$13,203.0/ -72.8 FTE) This program change eliminates the Lead Risk Reduction program. Firm and individual certifications for safe work practices for lead-based paint

[105] Jacobs, D.E.; Clickner, R.P.; Zhou, J.Y.; Viet, S.M.; Marker, D.A.; Rogers, J.W.; Zeldin, D.C.; Broene, P.; and Friedman, W. (2002). The prevalence of lead-based paint hazard in U.S. housing. Environmental Health Perspectives, 110(10): A599-A606.
[106] Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (September, 2012). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. http://www.cdc.gov/exposurereport/.

abatement and renovation and repair efforts will be funded through the Chemical Risk Review and Reduction program.

**Statutory Authority:**

Toxic Substances Control Act (TSCA), §§ 401-412.

# Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$10,654.3*** | ***$11,218.0*** | ***$5,615.0*** | ***-$5,603.0*** |
| Leaking Underground Storage Tanks | $9,554.5 | $9,177.0 | $6,452.0 | -$2,725.0 |
| Total Budget Authority | $20,208.8 | $20,395.0 | $12,067.0 | -$8,328.0 |
| Total Workyears | 98.8 | 108.1 | 68.8 | -39.3 |

## Program Project Description:

Releases of petroleum from underground storage tanks (UST) can contaminate groundwater, the drinking water source for many Americans. Environmental Program Management funding helps prevent releases by providing states[107] and tribes with technical assistance and guidance, and by funding work that assists states and tribes.

EPA partners with tribes to maintain information on tribal USTs and is the primary implementer of the UST program in Indian country. With few exceptions, tribes do not have independent UST program resources. This funding supports direct implementation of UST program in Indian country.

In 2005, Congress passed the Energy Policy Act which, along with other release prevention measures, required states to inspect all facilities in their jurisdictions at least once every three years. EPA has been supporting states in these efforts (and ensuring these requirements are met before continuing to grant additional funding for this). A recent EPA study suggests that increased UST compliance is a result of increasing inspection frequency prompted by the Act. EPA's statistical model, using the State of Louisiana's UST data, showed a positive and statistically significant effect of increased inspection frequency on facility compliance.[108] This evidence supports the data trends the agency has been witnessing: compliance rates are higher today than they were a decade ago as a result of the three-year inspection requirement.

## FY 2019 Activities and Performance Plan:

[107] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[108] Sullivan, K. A. and A. Kafle. Do more frequent inspections improve compliance? Evidence from underground storage tank facilities in Louisiana. OCPA Working Paper No. 2017-05. May 2017. https://www.epa.gov/sites/production/files/2017-06/documents/olem_ocpa_working_paper_do_more_frequent_inspections_improve_compliance.pdf.

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. EPA, with its state and tribal partners, works to prevent releases of contamination and in partnership with tribes, provides training, compliance assistance, and inspection support to implement the 2015 underground storage tank (UST) regulations in Indian country. In FY 2017, EPA developed an inspector training course and an operator exam to be made available in FY 2018. These tools support the priorities included in the FY 2018-2022 Strategic Plan.

In FY 2019, EPA will:

- Implement a targeted UST Tribal program, including inspections, enforcement, compliance assistance, and data management.

- Continue to coordinate with state UST prevention programs.

- Provide technical assistance, compliance help, and expert consultation to state, tribal, and stakeholders on both policy and technical matters. This support strives to strengthen our network of federal, state, tribal, and local partners (specifically communities and people living and working near UST sites) and assists implementation of the UST regulations.

- Provide guidance, training and assistance to the regulated community to improve understanding and compliance.

- Work with states and tribes regarding UST compatibility with alternative fuels. Work in this area is important given the national growth in biofuels and other emerging fuels, and the significant findings regarding the increasing prevalence of corrosion of UST system equipment containing ethanol or diesel fuels.[109]

**Performance Measure Targets:**

| (114) Number of confirmed releases at UST facilities in Indian country. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 11 | 11 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$375.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5,978.0/ -27.2 FTE) This program change reflects a reduced workload due to the proposed elimination of the LUST Prevention and the Categorical Grant Underground Storage Tanks programs. With remaining resources, the program will continue to directly implement a targeted compliance and release prevention program in Indian country and

[109] See EPA website – www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3.

work with any state partners who choose to maintain an UST program after the elimination of the federal grant funds.

**Statutory Authority:**

Resource Conservation and Recovery Act, § 8001, 9001-9011.

# Water Ecosystems

**Wetlands**

Program Area: Water: Ecosystems
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$20,448.7*** | ***$20,922.0*** | ***$17,913.0*** | ***-$3,009.0*** |
| Total Budget Authority | $20,448.7 | $20,922.0 | $17,913.0 | -$3,009.0 |
| Total Workyears | 133.0 | 137.3 | 115.0 | -22.3 |

**Program Project Description:**

EPA's Wetlands Protection program has two primary components: the Clean Water Act (CWA) Section 404 regulatory program and the state and tribal development program. Major activities of the program include timely and efficient review of Section 404 permit applications submitted to the U.S. Army Corps of Engineers (USACE) or authorized states; partnering with the USACE, states and other stakeholders to improve compensatory mitigation effectiveness and availability of credits; assisting in the development of state and tribal wetland protection programs under the CWA; and providing technical assistance to the public on wetland management and legal requirements.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan.

Clean Water Act Section 404:

The USACE is responsible for managing the day-to-day permit processes nationwide under Section 404 of the CWA. EPA provides input to the USACE as it develops proposed permits. EPA and USACE will work together to evaluate options for improving efficiencies in federal CWA 404 permitting that would help reduce potential costs and delays, increase consistency and predictability, and improve protection of public health and the environment.

EPA will continue carrying out its responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the RESTORE Act, and as a Natural Resource Damage Assessment Trustee for the Deepwater Horizon oil spill under the Oil Pollution Act. With specific regards to Section 404 of the CWA, the RESTORE Act, and OPA, EPA responsibilities include timely, environmentally-sound, and compliant implementation of National Environmental Policy Act review and associated permitting. Under NRDA, EPA is a cooperating or lead federal agency for NEPA on all Trustee Implementation Group (TIG) restoration plans, and the appropriate level

of NEPA analysis is integrated into the restoration plans. EPA's RESTORE responsibilities include NEPA analysis for projects that EPA has been assigned by the Council.

Build State and Tribal Wetlands Program:

EPA will work with states and tribes to target the Wetlands Protection program funds to core statutory requirements while providing states and tribes with the flexibility they need to best address their particular priorities. This includes continued EPA assistance for states and tribes interested in assuming administration of the CWA Section 404 program. EPA will continue to administer Wetland Program Development Grants in support of state and tribal wetland programs, with a focus on working more efficiently with states and tribes to achieve specific program development outcomes.[110]

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$507.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$3,516.0/ -22.3 FTE) This program change reduces resources for the Wetlands program. EPA will work with USACE, states, and tribes to increase consistency and predictability in the Wetlands program as well as streamlining business processes.

**Statutory Authority:**

Clean Water Act, § 404.

[110] For more information, visit https://www.epa.gov/wetlandsor http://www.cfda.gov.

**National Estuary Program / Coastal Waterways**
Program Area: Water: Ecosystems
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$26,759.1*** | ***$26,542.0*** | ***$0.0*** | ***-$26,542.0*** |
| Total Budget Authority | $26,759.1 | $26,542.0 | $0.0 | -$26,542.0 |
| Total Workyears | 34.3 | 43.6 | 0.0 | -43.6 |

**Program Project Description:**

The National Estuary Program (NEP)/Coastal Waterways programs works to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds to protect and restore water quality, habitat, and living resources.[111]

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$26,542.0/ -43.6 FTE) This program change eliminates the National Estuary Program/Coastal Waterways programs. EPA will encourage states to continue this work and continue to implement conservation management plans.

**Statutory Authority:**

Great Lakes Legacy Reauthorization Act of 2008; Clean Water Act, Section 320; Estuaries and Clean Waters Act of 2000; Protection and Restoration Act of 1990; North American Wetlands Conservation Act.

[111] For more information, visit https://www.epa.gov/nep.

# Water: Human Health Protection

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$95,917.2*** | ***$96,200.0*** | ***$80,543.0*** | ***-$15,657.0*** |
| Science & Technology | $3,517.0 | $3,495.0 | $3,595.0 | $100.0 |
| Total Budget Authority | $99,434.2 | $99,695.0 | $84,138.0 | -$15,557.0 |
| Total Workyears | 505.3 | 522.7 | 443.3 | -79.4 |

**Program Project Description:**

Safe drinking water is critical for protecting human health and the economic vitality of the nation. Approximately 320 million Americans rely on the safety of tap water provided by public water systems (PWSs) that are subject to national drinking water standards.[112] EPA's Drinking Water Program is based on a multiple-barrier and source-to-tap approach to protecting public health from contaminants in drinking water. EPA protects public health through: (1) source water assessment and protection; (2) promulgation of new or revised National Primary Drinking Water Regulations (NPDWRs); (3) training, technical assistance, and financial assistance programs to enhance public water system capacity to comply with regulations and provide safe drinking water; (4) underground injection control (UIC) programs; (5) supporting implementation of NPDWRs by state and tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies; and (6) providing states and tribes with resources and tools to support the financing of water infrastructure improvements.[113]

In recent years, water contamination from harmful algal blooms on Lake Erie, and a chemical storage tank leak on the Elk River that lead to "do not drink" and "do not use" advisories in Toledo, OH and Charleston, WV, respectively, prevented access to safe drinking water for residents, hospitals, schools, and businesses in these communities, causing economic impacts in the tens of millions of dollars. The drinking water issues in Flint, Michigan and East Chicago, Indiana highlighted the need for additional attention to lead in drinking water. In addition per- and polyfluoroalkyl substances (PFAs) such as Perfluorooctanoic acid (PFOA), Perfluorooctanesufonic acid (PFOS) and Gen-X have been detected in drinking water systems and there is increased demand for tools that can help communities across the country protect public health and address these chemicals. These events highlight the importance of safe drinking water

[112] U.S. Environmental Protection Agency Safe Drinking Water Information System (SDWIS/FED), http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/index.cfm.
[113] For more information, please see https://www.epa.gov/ground-water-and-drinking-water and https://www.cfda.gov.

to public health and local economies, and in particular, the need to prioritize threats and protect drinking water sources.

In FY 2017, 92.8 percent of the population served by Community Water Systems (CWSs) received drinking water that met all applicable health-based drinking water standards. Ongoing compliance challenges include violations related to the Lead and Copper, the revised Total Coliform, the Stage 2 Disinfectants and Disinfection Byproducts, and the Nitrates Rules.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue its core mission to protect the public from contaminants in drinking water by: (1) developing new and revised drinking water standards; (2) supporting states, tribes, and water systems in implementing standards; (3) enabling financing of infrastructure projects while promoting partnerships and sustainable management of drinking water systems; and (4) promoting source water protection and implementing the underground injection control (UIC) program. In FY 2019, the Agency will continue to streamline its business processes and systems to reduce reporting burden on states and regulated facilities, and improve the effectiveness and efficiency of regulatory programs for EPA, states, and tribes.

Water Infrastructure

With the aging of the nation’s critical water infrastructure and a growing need for investment, the drinking water and wastewater sectors face a significant challenge to maintain and advance the achievements attained in protecting public health and the environment. In FY 2019, EPA will continue its robust funding of the nation’s infrastructure. EPA will focus efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation’s water infrastructure.

This program supports the policy and fiduciary oversight of the Drinking Water State Revolving Fund (DWSRF) program, which provides low-interest loans to help finance drinking water infrastructure improvements needed to achieve compliance with the Safe Drinking Water Act (SDWA). The program supports policies and outreach that help ensure the good financial condition of the State Revolving Funds.

The FY 2019 budget continues to provide funding for the Environmental Finance program which will help communities across the country improve their wastewater, drinking water, and stormwater systems, particularly through innovative financing. EPA will continue to support financing and construction of drinking water infrastructure and encourage public water systems to adopt sustainable management practices by doing the following:

- Provide states with funds, through the DWSRF capitalization grants, for low-interest loans to assist utilities with financing drinking water infrastructure needs and to support utility compliance with SDWA standards;
- Provide non-infrastructure support for states to use the set-asides in the DWSRF to build water system technical and managerial capacity;

- Provide effective oversight of the DWSRF funds;
- Advise states on maintaining their capacity development and operator certification programs to support compliance by public water systems with the SDWA and to enable water systems, especially small systems, to meet statutory prerequisites for receiving infrastructure financing;
- Encourage states to develop state-centric tools, in lieu of national tools, to assist water systems with capacity development; and
- Continue to support close coordination between state infrastructure and PWSS programs.

Drinking Water Implementation

In FY 2019, the Agency will continue to work with states to implement requirements for all NPDWRs to ensure that systems install, operate, and maintain appropriate levels of treatment and effectively manage their distribution systems. In particular, EPA will continue to focus on working with states to optimize corrosion control treatment and develop other strategies to minimize exposure to lead. EPA also will continue to require states to report violations data at all public water systems for all rules, including requirements to protect against Cryptosporidium, to control disinfection byproducts and to implement the Revised Total Coliform Rule.

While most small systems consistently provide safe and reliable drinking water to their customers, many small systems face challenges with aging infrastructure, complying with regulatory requirements, workforce shortages and high staff turnover, increasing costs, and declining rate bases. In FY 2017, small community water system violations made up 94 percent of overall violations;[114] and in Indian Country, 90.5 percent of the population served by CWSs received drinking water that met all applicable health-based standards. EPA will continue to focus on small systems by strengthening and targeting financial assistance, in coordination with state infrastructure programs, to support rehabilitation of the nation's infrastructure.

Drinking water system partnerships provide opportunities to increase capacity by working together to solve compliance challenges, share costs of operations and maintenance activities, and leverage other resources. EPA's new website highlights ways partnerships can address these challenges, leading to enhanced public health by working together and sharing information: https://www.epa.gov/dwcapacity/water-system-partnerships. The Agency will continue to promote partnerships among water systems to build capacity and work with states and tribes, as well as with utility associations, third-party technical assistance providers and other federal partners, to promote the sustainability practices that are the foundation for building technical, managerial, and financial capacity, known as Capacity Development.[115]

Key to addressing the most pressing public water system issues is being able to identify which systems have the greatest need and then efficiently interacting with those systems. In FY 2019, EPA will continue working with states to transition to the SDWIS Prime program management and reporting tool. SDWIS Prime is a centralized infrastructure technology system that will replace SDWIS State, currently used by the majority of state drinking water programs, and other systems that are hosted and operated separately by each primacy agency. Benefits of this transition to

[114] For more information, see: https://www.epa.gov/waterdata/drinking-water-tools.
[115] For more information, see: http://water.epa.gov/type/drink/pws/smallsystems/index.cfm.

SDWIS Prime include improvements in program efficiency and data quality, greater public access to drinking water data, facilitation of electronic reporting, reductions in reporting burdens on laboratories and water utilities, reductions in data management burden for states, and ultimately reduction in public health risk.

In FY 2016, EPA released the Compliance Monitoring Data Portal (CMDP) enabling drinking water utilities and laboratories to report drinking water data electronically to primacy agencies. In FY 2017, EPA provided support for the first three primacy agencies to receive utility compliance data electronically, and supported over twenty additional primacy agencies with testing CMDP and preparation to move to the system. The portal increases data accuracy and completeness and, once fully implemented, could decrease the overall reporting burden for primacy agencies by hundreds of thousands of hours. Primacy agencies can use the portal-reported data to make more informed decisions about water system compliance and focus their limited resources on preventing and responding to public health problems. In FY 2018 and FY 2019, EPA will be assisting additional primacy agencies in testing and utilizing CMDP to receive drinking water compliance sampling data electronically.

In FY 2019, EPA also will conduct the following activities to facilitate compliance with rules:

- Oversee the national Public Water System Supervision (PWSS) program by administering the PWSS grants to states and measuring program results based on state reporting of health-based rule violations at public water systems for over 90 drinking water contaminants (i.e., microbial pathogens and disinfection byproducts, other chemicals, and radiological contaminants);
- Offer training and technical assistance on a prioritized basis to states, tribes, and public water systems for the Lead and Copper Rule (LCR);
- Directly implement the Aircraft Drinking Water Rule, designed to protect millions of people who travel on approximately 5,700 aircraft in the U.S., if necessary to address identified significant risks; and
- Directly implement the drinking water program where states and tribes do not have primacy (*e.g.*, Wyoming, the District of Columbia, and tribal lands), focused on actions that are under court order or address significant identified risks.

Drinking Water Standards

To assure the American people that their water is safe to drink, EPA's drinking water regulatory program monitors for a broad array of contaminants, evaluates whether contaminants are of public health concern, and regulates contaminants when there is a meaningful opportunity for health risk reduction for persons served by public water systems. In addition, EPA will work to reduce lead risks by continuing to work on revisions to the LCR, and regulations to implement the Water Infrastructure Improvement for the Nation Act and the Reduction of Lead in Drinking Water Act (RLDWA). EPA will continue its communication with states, tribes, and communities, to understand local perspectives on the quality of drinking water.

The Agency also will continue to evaluate and address drinking water risks in FY 2019, including:

- Preparing regulatory decisions for perchlorate by October 2018 in accordance with a consent decree.
- Evaluating recommendations from stakeholders to develop revisions to the LCR.
- Evaluating the public comments and any additional data received on the proposed rule that makes changes to existing "lead free" regulations based on the 2011 RLDWA and the 2013 Community Fire Safety Act that prohibits the use and introduction into commerce of lead pipes, plumbing fittings or fixtures, and solder and flux.[116]
- Collecting and analyzing health effects and occurrence data to assess contaminants on the fourth contaminant candidate list (CCL 4), that includes PFOA, PFOS, and 1-4 Dioxane, for regulatory determinations. Continued evaluation of these contaminants in FY 2019 is critical for the Agency to publish preliminary determinations,
- Leading a cross-agency effort to address PFAs, which include PFOA, PFOS and GenX to better understand the health impacts, the extent of occurrence in the environment and exposures to PFAS and to develop tools for states, tribes and local communities.
- Providing support to and oversight of drinking water systems and laboratories as they collect and analyze samples during the implementation of the fourth Unregulated Contaminant Monitoring Rule (UCMR 4). UCMR 4 requires monitoring for 30 chemical contaminants between 2018 and 2020.

Source Water Protection

EPA will continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure effort because source water protection can reduce the need for additional drinking water treatment and the associated additional infrastructure costs and energy usage, while better protecting public health.

In FY 2019, the Agency will:

- Work with state, utility, and local stakeholder organizations to encourage continuing engagement in the Source Water Collaborative,[117] which works to leverage resources, support efforts to assist communities in source water protection activities and projects, and promote ongoing efforts to protect drinking water sources.
- Continue to support users of the existing data-layers of the Drinking Water Mapping Application for Protecting Source Waters (DWMAPS)[118] through EPA's geoplatform. This online GIS-based application enables states, utilities and others to combine national datasets previously integrated with DWMAPS with their own datasets, such as chemical storage facilities and sensitive drinking water intakes, to evaluate threats to drinking water. DWMAPS also allows users to leverage CWA data to analyze and coordinate water quality assessments, impaired waters, and point source permit information to protect drinking water sources.

[116] For more information, see: https://www.epa.gov/dwstandardsregulations/use-lead-free-pipes-fittings-fixtures-solder-and-flux-drinking-water.
[117] For more information, see: https://www.epa.gov/sourcewaterprotection/source-water-collaborative.
[118] For more information, see: https://www.epa.gov/sourcewaterprotection/dwmaps.

Underground Injection Control (UIC)

In order to safeguard current and future underground sources of drinking water from contamination, the UIC program regulates the construction, operation, permitting, and closure of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery. The number of UIC wells, especially Class II oil- and gas-related wells, has risen significantly in recent years, and this trend is expected to continue. Additionally, as population growth, land use changes and drought exacerbate water supply challenges in many areas of the country, management of water availability has become increasingly important in providing safe and reliable drinking water to communities.

In FY 2019, EPA will continue to provide technical support to states and tribes in making permitting decisions, providing training for and oversight to implementation of underground injection regulations, and directly implement the UIC regulations where EPA has primary authority. Activities include:

- Working with the Ground Water Protection Council, Interstate Oil and Gas Compact Commission, and the National Rural Water Association to identify best practices in oil and gas development, such as reuse and recycling of produced water, that can help safeguard public health, recognizing the important role that energy extraction, including natural gas development plays in our energy future;
- Working with authorized state and tribal agencies in their efforts to effectively manage Class II enhanced oil and gas recovery wells and oil and gas-related disposal wells in a rapidly growing energy sector to protect underground sources of drinking water;
- Working towards transferring primary enforcement authority from EPA direct implementation to state and tribal programs that apply for primacy.
- Reviewing, approving, and codifying state UIC program changes, such as updates to Class V regulations in Oregon and Class V and Class II changes in Idaho.
- Promoting implementation of a nationally consistent and predictable approach to reviewing and approving aquifer exemption requests;
- Working with the State of California to review and approve aquifer exemptions so that the state program is consistent with the SDWA and UIC regulations. EPA approved six aquifer exemptions in 2017, and will continue to review as they are submitted to EPA;
- Providing technical assistance, tools and strategies to states for improving implementation of UIC programs, including approaches to reduce the number of earthquake events related to underground injection activities; and
- Using national UIC data to assist with program oversight of state and EPA UIC programs.

**Performance Measure Targets:**

| **(DW-04) Percentage of the population in Indian Country served by community water systems that receive drinking water that meets all applicable health-based drinking water standards.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 87 | 88 |

| (DW-03) Percentage of population served by CWSs that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 92 | 92 |

| (DW-02) Number of community water systems without a sanitary survey within the last three years (five years for outstanding performance). | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 4,473 | 4,373 |

| (DW-01) Number of community water systems out of compliance with health-based standards. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 3,510 | 3,420 |

## FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+$2,122.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$17,779.0 / -77.3 FTE) This program change represents a reduction in the Drinking Water Programs and streamlining activities. The program will continue to seek efficiencies in operations and evaluate and prioritize resources across activities.

## Statutory Authority:

Safe Drinking Water Act (SDWA); Clean Water Act.

**Beach / Fish Programs**
Program Area: Water: Human Health Protection
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$1,364.0*** | ***$1,638.0*** | ***$0.0*** | ***-$1,638.0*** |
| Total Budget Authority | $1,364.0 | $1,638.0 | $0.0 | -$1,638.0 |
| Total Workyears | 1.2 | 3.8 | 0.0 | -3.8 |

**Program Project Description:**

The Fish component of the Beach/Fish Programs provides up-to-date-science, guidance, technical assistance, and nationwide information to state, tribal, and federal agencies on the human health risks associated with eating potentially contaminated locally caught fish.

The Beach component of the Beach/Fish Programs provides up-to-date science, guidance, technical assistance and nationwide information to state, tribal, and federal agencies on the human health risks of swimming in pathogen contaminated waters.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. The Agency will encourage states to continue this work within ongoing core programs.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,638.0/ -3.8 FTE) This program change eliminates the Beach/Fish Programs, which is a mature, well-established program with objectives that can continue to be implemented at the local level.

**Statutory Authority:**

Clean Water Act, § 104.

# Water Quality Protection

**Surface Water Protection**
Program Area: Water Quality Protection
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$198,589.4*** | ***$198,886.0*** | ***$174,975.0*** | ***-$23,911.0*** |
| Total Budget Authority | $198,589.4 | $198,886.0 | $174,975.0 | -$23,911.0 |
| Total Workyears | 994.1 | 1,015.9 | 937.1 | -78.8 |

## Program Project Description:

The Surface Water Protection program, under the Clean Water Act (CWA), directly supports efforts to protect, improve, and restore the quality of our nation's rivers, lakes, and streams. EPA works with states and tribes to make continued progress toward clean water goals.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. EPA will work with states and tribes to target funds to core requirements while providing states and tribes with flexibility to best address their particular priorities for Surface Water Protection.

Program Implementation

In FY 2019, EPA will continue to provide scientific water quality criteria information, review and approve state water quality standards, and review and approve state lists of impaired waters. Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. EPA will continue to support state and tribal programs by providing scientific water quality criteria information as required by CWA section 304. EPA also will continue to support states and authorized tribes in adopting and implementing water quality standards in accordance with the water quality standards regulation at 40 CFR part 131.

EPA will continue to establish or revise effluent guidelines as required under the CWA, including the completion of annual reviews of industrial wastewater discharges, publishing preliminary effluent limitation guideline plans for public review, and then final biennial plans informed by public comment. As required under CWA Section 304(h), EPA will revise existing and adopt new analytical test methods for measuring pollutants in wastewater to incorporate cheaper, safer, faster, more sensitive and/or more accurate analytical test methods.

EPA will work with states and other partners on Total Maximum Daily Loads (TMDLs) as required by CWA section 303(d) and on other waterbody restoration plans for listed impaired waterbodies. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented through local, state, and federal watershed plans and programs to restore waters. EPA will work with states and tribes on their section 303(d) program and plans and ensure they are effective. Support also will be provided to control nonpoint sources of pollution and ensure the protection of high-quality waters.

EPA will continue working with states and tribes to support the National Aquatic Resource Surveys (NARS) statistically representative monitoring of the condition of the nation's waters which support CWA section 305(b). EPA will continue working with states and tribes to support base water quality monitoring and priority enhancements that serve state and tribal CWA programs in a cost-efficient and effective manner. EPA will continue supporting state and tribal water quality data exchange and tools to maximize use of data from multiple organizations to support water quality management decisions.

EPA and the Department of the Army are implementing the President's Executive Order directing the Administrator of EPA and the Assistant Secretary of the Army for Civil Works to review the 2015 Clean Water Rule (CWR) and publish for notice and comment a proposed rule rescinding or revising the rule, as appropriate and consistent with law. To date, the agencies have published a proposed rule to rescind the definition of "Waters of the United States" promulgated in the CWR and re-codify the previous definition in place prior to the rule. In addition, while the agencies substantively reconsider the definition of "Waters of the United States," they have finalized a rule which will have the effect of delaying any implementation of the 2015 Clean Water Rule for two years.

In FY 2019, EPA will continue to implement and support the core water quality programs that control point source discharges through permitting and pretreatment programs. The National Pollutant Discharge Elimination System (NPDES) program under the CWA works with states to structure the permit program to better support comprehensive protection of water quality on a watershed basis.

Infrastructure

EPA will continue its support of the nation's infrastructure. EPA will focus efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation's water infrastructure. This program supports the policy and fiduciary oversight of the Clean Water State Revolving Fund Loan program, which provides low-interest loans to help finance wastewater treatment facilities and other water quality projects. The program supports policies and outreach that help ensure the good financial condition of the State Revolving Funds.

Part of this program supports the Clean Watershed Needs Survey (CWNS). The CWNS is an assessment of the capital needs to meet the water quality goals set in the Clean Water Act.

The FY 2019 budget supports funding for the Environmental Finance program which will help communities across the country improve their wastewater and stormwater systems, particularly through innovative financing.

Program Oversight/Accountability

States and tribes play a critical role in implementing the CWA. For programs where states and tribes have primacy, the Agency will focus on providing oversight and assistance.

The Agency will continue to support states in electronically reporting 303(d) and 305(b) assessment conclusions through the Assessment and TMDL Tracking Implementation System (ATTAINS) to track improvements in impaired waters. This tool reduces burden on states to track and report progress in meeting water quality standards in waters targeted for local action and greatly improve evidence-based tracking of local actions to improve water quality. In addition, as required under the CWA and Executive Orders 12866, 135638, and 13771, EPA will continue to support cost-benefit analysis for CWA regulatory and deregulatory actions.

**Performance Measure Targets:**

| **(SWP-01) Reduction in the number of square miles of watershed with surface water not meeting standards (cumulative).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | No Target Established | 9,000 |

| **(NPDES-02) Percentage of high-priority EPA and state NPDES permits (including tribal) that are issued in the fiscal year.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 80 | 80 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$4,255.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$28,166.0/ -78.8 FTE) This program change reduces Surface Water Protection program resources, including the elimination of the WaterSense program and certain activities in the Urban Waters program. EPA will focus remaining resources on statutory requirements and highest priority work.

**Statutory Authority:**

Clean Water Act; Clean Water Act; Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act); Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

**Marine Pollution**
Program Area: Water Quality Protection
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$11,694.4*** | ***$10,102.0*** | ***$0.0*** | ***-$10,102.0*** |
| Total Budget Authority | $11,694.4 | $10,102.0 | $0.0 | -$10,102.0 |
| Total Workyears | 36.1 | 37.4 | 0.0 | -37.4 |

**Program Project Description:**

EPA's Marine Pollution Program partners with other agencies, including the Department of Defense, the National Oceanic and Atmospheric Administration, and others to integrate management of oceans and coasts. This program aims to: 1) ensure marine ecosystem protection; 2) manage ocean dumping of dredged material and limit and prevent disposal of wastes and other materials in the ocean; 3) address emerging environmental threats to the marine and coastal water quality; 4) protect sensitive marine habitats; and 5) gather data and undertake research to inform policy and program decisions for protection of the marine and near coastal environment.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. EPA will seek opportunities to continue to meet statutory mandates through the national water program.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$10,102.0/ -37.4 FTE) This program change eliminates the Marine Pollution program. Other federal agencies may continue to support these efforts.

**Statutory Authority:**

Clean Water Act; Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act); Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

# Indoor Air and Radiation

**Radiation: Response Preparedness**
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$2,543.1*** | ***$2,573.0*** | ***$2,221.0*** | ***-$352.0*** |
| Science & Technology | $3,785.0 | $3,658.0 | $3,666.0 | $8.0 |
| Total Budget Authority | $6,328.1 | $6,231.0 | $5,887.0 | -$344.0 |
| Total Workyears | 39.7 | 39.2 | 31.5 | -7.7 |

## Program Project Description:

EPA generates policy guidance and procedures for the Agency's radiological emergency response under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Agency maintains its own Radiological Emergency Response Team (RERT) and is a member of the Federal Radiological Preparedness Coordinating Committee (FRPCC) and the Federal Advisory Team for Environment, Food and Health (the "A-Team"). EPA continues to respond to radiological emergencies, conducts essential national and regional radiological response planning and training, and develops response plans for radiological incidents or accidents.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to evaluate its resources and streamline activities across radiological emergency response activities and assets to focus on essential preparedness work. The RERT will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will design and conduct essential training and exercises to maintain the RERT's ability to fulfill EPA's responsibilities and improve overall radiation response preparedness.[119]

*Evaluation of Response Plans*

In FY 2019, EPA will continue to work with interagency partners under the FRPCC to revise federal radiation emergency response plans and develop radiological emergency response protocols and standards as resources dictate. The Agency will continue to use guidance addressing lessons learned from incidents and exercises to ensure the effective delivery of EPA support in coordination with other federal and state response agencies.

[119] For additional information see: https://www.epa.gov/radiation/radiological-emergency-response-expertise-and-equipment.

*Coordinating Preparedness Efforts*

EPA will continue essential planning and participation in international and federal table-top and field exercises, including radiological anti-terrorism activities with the Nuclear Regulatory Commission (NRC), the Department of Energy (DOE), the Department of Defense (DOD), and the Department of Homeland Security (DHS). The Agency also will continue to train state, local and federal officials; provide technical support on priority issues to federal and state radiation, emergency management, solid waste and health programs responsible for radiological emergency response; and develop preparedness programs.

*Assessment*

EPA will continue to develop and use both laboratory and field measurement methods; procedures and quality systems to support expedited assessment; and characterization of areas impacted with radiological contamination. These methods and procedures will support rapid assessment and triage of impacted areas (including buildings, indoor environments and infrastructure) and the development of cleanup strategies.

**Performance Measure Targets:**

| **(R35) Percentage level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 80 | 80 |

| **(R36) Average number of days before availability of quality assured ambient radiation air monitoring data during an emergency.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 0.3 | 0.3 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$162.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$514.0/ -3.4 FTE) This program change is a reduction in the Radiation: Response Preparedness program, decreasing technical support for stakeholders that are responsible for radiological emergency response.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Homeland Security Act of 2002; Atomic Energy Act of 1954; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Clean Air Act; Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA); Public Health Service Act (PHSA); Robert T. Stafford Disaster Relief and Emergency Assistance Act; Safe Drinking Water Act (SDWA).

## Indoor Air: Radon Program

Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$2,985.9*** | ***$3,115.0*** | ***$0.0*** | ***-$3,115.0*** |
| Science & Technology | $145.0 | $158.0 | $0.0 | -$158.0 |
| Total Budget Authority | $3,130.9 | $3,273.0 | $0.0 | -$3,273.0 |
| Total Workyears | 9.2 | 10.6 | 0.0 | -10.6 |

**Program Project Description:**

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities to address the public health risk posed by exposure to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance, and advises the public of steps they can take to reduce exposure. For over 30 years EPA's radon program has provided important guidance and significant funding to help states establish their own programs.

**FY 2019 Activities and Performance Plan:**

Resources and FTE for this program are proposed for elimination in FY 2019. This is a mature program where states have technical capacity to continue this work.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$3,115.0/ -10.6 FTE) This program change proposes to eliminate the Indoor Air: Radon program.

**Statutory Authority:**

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA); Clean Air Act.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$7,780.1*** | ***$8,519.0*** | ***$2,000.0*** | ***-$6,519.0*** |
| Science & Technology | $2,328.6 | $1,996.0 | $1,000.0 | -$996.0 |
| Hazardous Substance Superfund | $1,833.6 | $1,972.0 | $1,972.0 | $0.0 |
| Total Budget Authority | $11,942.3 | $12,487.0 | $4,972.0 | -$7,515.0 |
| Total Workyears | 58.9 | 59.1 | 25.0 | -34.1 |

**Program Project Description:**

EPA has general and specific duties to protect human health and the environment from harmful and avoidable exposure to radiation under the Atomic Energy Act; Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act; Energy Policy Act; Nuclear Waste Policy Act; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act; Waste Isolation Pilot Plant Land Withdrawal Act; Marine Protection, Research, and Sanctuaries Act; and Clean Water Act.

EPA's Radiation Protection Program carries out these responsibilities through its federal guidance and standard-setting activities, including: regulatory oversight of radioactive waste disposal standards at the Department of Energy's Waste Isolation Pilot Plant (WIPP);[120] the regulation of airborne radioactive emissions; and the development and determination of appropriate methods to measure radioactive releases and exposures under Section 112 of the Clean Air Act.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. EPA will meet its statutory obligation to implement its regulatory oversight responsibilities for Department of Energy (DOE) activities at the Waste Isolation Pilot Plant (WIPP) facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992. EPA also will review and update regulation or guidance, as necessary.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

[120] Additional information at: http://www.epa.gov/radiation/wipp/background.html.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$396.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$6,123.0/ -26.8 FTE) This program change reduces support activities in the Radiation: Protection program to focus Agency resources on priority activities, including implementation of waste disposal standards at the WIPP.

**Statutory Authority:**

Atomic Energy Act of 1954; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Energy Policy Act of 1992; Nuclear Waste Policy Act of 1982; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978; Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Marine Protection, Research, and Sanctuaries Act; Clean Water Act.

**Reduce Risks from Indoor Air**
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$13,389.1*** | ***$13,242.0*** | ***$0.0*** | ***-$13,242.0*** |
| Science & Technology | $253.3 | $144.0 | $0.0 | -$144.0 |
| Total Budget Authority | $13,642.4 | $13,386.0 | $0.0 | -$13,386.0 |
| Total Workyears | 38.6 | 40.7 | 0.0 | -40.7 |

**Program Project Description:**

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate risk reduction efforts at the federal, state, and local levels. EPA utilizes a range of strategies, including partnerships with non-governmental, professional, federal, state and local organizations, to educate and prepare individuals, school districts, industry, the health care community, and others to take action to reduce health risks from poor indoor air quality in homes, schools, and other buildings.

**FY 2019 Activities and Performance Plan:**

Resources and FTE for this program are proposed for elimination in FY 2019. This is a mature program where states have technical capacity to continue this work.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$13,242.0/ -39.1 FTE) This change proposes to eliminate funding for the Reduce Risks from Indoor Air program.

**Statutory Authority:**

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA); Clean Air Act.

# Congressional Priorities

## Water Quality Research and Support Grants

Program Area: Congressional Priorities
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Environmental Program & Management*** | ***$12,688.0*** | ***$12,614.0*** | ***$0.0*** | ***-$12,614.0*** |
| Science & Technology | $7,803.4 | $4,072.0 | $0.0 | -$4,072.0 |
| Total Budget Authority | $20,491.4 | $16,686.0 | $0.0 | -$16,686.0 |

**Program Project Description:**

The purpose of this program is to provide training and technical assistance for small public water systems to help such systems achieve and maintain compliance with the Safe Drinking Water Act (SDWA) and to provide training and technical assistance for small publicly-owned wastewater systems, communities served by onsite/decentralized wastewater systems, and private well owners to improve water quality under the Clean Water Act (CWA).

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision funds and set-asides from the Drinking Water State Revolving Fund (DWSRF).

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$12,614.0) This funding change eliminates the Water Quality competitive grant program since resources are available through other existing programs and states are best positioned to develop technical assistance plans for their water systems.

**Statutory Authority:**

SDWA, 42 U.S.C. §300j-1c, Section 1442. CWA.104(b)(3).

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**APPROPRIATION: Inspector General**

## Resource Summary Table

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Inspector General** | | | | |
| Budget Authority | $41,053.7 | $41,207.0 | $37,475.0 | -$3,732.0 |
| Total Workyears | 219.0 | 268.0 | 201.4 | -66.6 |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

## Bill Language: Inspector General

*For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, $37,475,000, to remain available until September 30, 2020.*

## Program Projects in IG

(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Audits, Evaluations, and Investigations | | | | |
| Audits, Evaluations, and Investigations | $41,053.7 | $41,207.0 | $37,475.0 | -$3,732.0 |
| **TOTAL IG** | **$41,053.7** | **$41,207.0** | **$37,475.0** | **-$3,732.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Audits, Evaluations, and Investigations

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Inspector General*** | ***$41,053.7*** | ***$41,207.0*** | ***$37,475.0*** | ***-$3,732.0*** |
| Hazardous Substance Superfund | $9,156.4 | $8,718.0 | $8,718.0 | $0.0 |
| Total Budget Authority | $50,210.1 | $49,925.0 | $46,193.0 | -$3,732.0 |
| Total Workyears | 266.0 | 318.1 | 242.0 | -76.1 |

**Program Project Description:**

EPA's Office of Inspector General (OIG) provides independent audit, program evaluation, inspection and investigative services and products that fulfill the requirements of the Inspector General Act, as amended, by identifying fraud, waste, and abuse in agency, grantee and contractor operations, and by promoting economy, efficiency, and effectiveness in the operations of the Agency's programs. Although the OIG is a part of EPA, to ensure its independence, as specified in the IG Act (as amended), the OIG is funded with a separate appropriation within the Agency. The OIG activities add value and enhance public trust and safety by providing the Agency, the public, and Congress with independent analyses and recommendations that help EPA management resolve risks and challenges, achieve opportunities for savings, and implement actions for safeguarding EPA resources and accomplishing EPA's environmental goals. The OIG activities also prevent and detect fraud in EPA's programs and operations, including financial fraud, laboratory fraud, and cybercrime. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity. The audit, program evaluation, inspection and investigative services programs are directly supported through the OIG's management and administrative functions of information technology, human resources, human capital, budget, planning and performance, legal advice and counseling, report publishing and communications, and congressional outreach.

In addition, EPA Inspector General was designated by Congress in 2004 to serve as the IG for the U.S. Chemical Safety and Hazard Investigation Board (CSB) and provides the full range of audit, evaluation and investigative services specified by the Inspector General Act, as amended. Specifically, the OIG conducts required audits of the CSB's financial statements and of CSB's compliance with the Federal Information Security Management Act. In addition, the OIG performs audits and evaluations of the CSB's programmatic and management activities and follow-up on prior audit recommendations.

**FY 2019 Activities and Performance Plan:**

EPA OIG assists the Agency in its efforts to reduce environmental and human health risks by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste and abuse; respond to cybercrimes; and resolve previously identified major management challenges and internal control weaknesses. In FY 2019, the OIG will continue recommending improvements to operating efficiency, transparency, secured and trustworthy systems, and the cost effective attainment of EPA's strategic goals and positive environmental impacts. These recommendations include focus on the core mission of delivering real results to provide Americans with clean air, land, and water.

OIG's plans are implemented through audits, evaluations, investigations, inspections, and follow-up reviews in compliance with the Inspector General Act (as amended), the Generally Accepted Government Accounting Standards, and the Quality Standards for Federal Offices of Inspector General of the Council of Inspectors General on Integrity and Efficiency.

OIG conducts the following types of assignments focused on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, program performance evaluations will be conducted in the areas of EPA's mission objectives for improving and protecting the environment and public health, including: air; water; land cleanup and waste management; toxics, chemical management and pollution prevention; and environmental research programs.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA programs and operations that undermine the organization's integrity and public trust, or create an imminent risk or danger. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations often lead to successful prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Major areas of investigative focus include: financial fraud, program integrity, threats to the Agency's resources, employee integrity, cybercrimes, and theft of intellectual or sensitive data.

A significant portion of audit resources will be devoted to statutorily mandated work assessing the financial statements of EPA, as required by the Chief Financial Officers Act and the Accountability of Tax Dollars Act of 2002, respectively. The OIG work also will include assessing the information security practices of EPA as required by the Federal Information Security Management Act. The OIG will examine the delivery and performance of national programs, as well as specific cross-regional and single region or place based issues that represent a risk to public health and the environment in response to stakeholder concerns.

Based on prior work, cross-agency risk assessment, agency challenges, future priorities, and extensive stakeholder input, the OIG will concentrate its resources on efforts in the following strategic objectives and continuing or prospective assignment areas during FY 2019:

Sound and Economical Financial Management

- Annual mandated improper payments audit
- Internal controls, continuous assessment and risk management
- Annual mandated financial statements audits
- Audits of costs claimed by grantees and contractors
- Grant and contract administration
- Maximizing cost efficiencies and process improvement
- Capital investments in information technology, equipment, facilities and other items
- Technological changes create transformation opportunities
- Annual mandated travel card program, including risk assessment
- Annual mandated purchase card and convenience check program, including risk assessment
- Mandated Toxic Substances Control Act (TSCA) fees assessment in accordance with the Digital Accountability and Transparency (DATA) Act
- Efficiency and effectiveness of collection and payment processes

Efficient Processes and Use of Resources

- Management of Brownfields Program
- Partnering or coordination with other agencies to maximize efficiencies
- Opportunities to reduce duplication, overlap and fragmentation within EPA
- Grant, Interagency Agreement Grant, and Interagency Agreement Management
- Efficiency and Effectiveness of Human Capital Management Programs

Ensuring the Integrity of EPA Information

- Protection from advanced persistent threats to steal/modify data
- Agency efforts to enhance its capability to respond to cyber-attacks
- Cybersecurity/infrastructure development; and assessment of processes to ensure protection and security of information systems from fraud, waste and abuse
- File server security
- Processes for Managing Background Investigations and Plan of Action and Milestones
- Annual mandated audit of compliance with the Federal Information Security Modernization Act
- Oversight of Chief Information Officer's responsibilities under the Federal Information Technology Acquisition Reform Act
- Mandated readiness reviews of agency DATA act implementation efforts

Assessing Risk Management and Performance Measurement

- Implementation of Federal Managers Financial Integrity Act, Federal Information Security Management Act and Government Performance and Results Act
- Disaster response and homeland security and emergency preparedness and response
- Construction grants and revolving loan funds awarded to states and territories

- Review of contractor federal performance
- Assistance agreements related to cleanup and Brownfields

Assessing Program Integrity, Results, Oversight, Enforcement

- Evaluation of the Management Audit Tracking System
- Evaluation of the Implementation of the Toxic Substances Control Act
- Oversight of Clean Water State Revolving Loan Funds
- Accessing EPA's policy, procedures, and internal controls to prevent or reduce improper computer use
- Evaluations of EPA's programs and activities to protect human health and the environment through progress toward air quality goals and compliance with requirements
- Evaluation of EPA's programs and adherence to requirements to protect and restore water that sustains human health and the environment
- Evaluation of EPA's programs, activities, requirements and initiatives to protect human health and the environment through hazardous waste cleanup, waste management, accident prevention and emergency response
- Evaluations of EPA's programs and requirements to protect human health and the environment from chemical risks, including implementation of the TSCA
- Evaluation of controls and processes in EPA's research and development programs that support EPA's core mission to protect human health and the environment

## Investigations

The Office of Investigations' (OI) mission is to conduct criminal, civil, and administrative investigations of fraud, waste and abuse and serious misconduct within EPA's programs, projects, and resources. OI investigations are worked in conjunction with the U.S. Department of Justice, as well as state and local prosecutors, for criminal and civil litigation or with EPA management for administrative action. OI currently investigates the following: 1) fraudulent practices in awarding, performing, and paying EPA contracts, grants, or other assistance agreements; 2) program fraud or other acts that undermine the integrity of, or confidence in EPA programs, or create an imminent environmental risk; 3) laboratory fraud relating to data, and false claims for erroneous laboratory results that undermine the basis for decision-making, regulatory compliance, or enforcement actions; 4) violent or criminal threats directed against EPA employees or facilities; 5) criminal conduct or serious administrative misconduct by EPA employees; and 6) intrusions into and attacks against EPA's network supporting program data, as well as incidents of computer misuse and theft of intellectual property or sensitive/proprietary data. Special attention will be directed towards identifying the tactics, techniques, and procedures that are being utilized by cybercriminals to obtain EPA information.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity. The results of OI's investigations are published and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved and administrative actions are taken to prevent those involved from further participation in any of EPA's programs or operation.

**Follow-up and Policy/Regulatory Analysis**

To further promote economy, efficiency and effectiveness, the OIG will conduct follow-up reviews of agency responsiveness to the OIG's recommendations to determine if appropriate actions have been taken and intended improvements have been achieved. This process will serve as a means for keeping Congress and EPA leadership apprised of accomplishments and opportunities for needed corrective actions, and facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act (as amended), the OIG also conducts reviews and analysis of proposed and existing policies, rules, regulations and legislation to identify vulnerability to waste, fraud and abuse. These reviews also consider possible duplication, gaps or conflicts with existing authority, leading to recommendations for improvements in their structure, content and application.

**Performance Measure Targets:**

| (35C) Return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 160 | 160 |

| (35B) Environmental and business recommendations or risks identified for corrective action. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 460 | 460 |

| (35A) Environmental and business actions taken for improved performance or risk reduction. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 196 | 196 |

| (35D) Criminal, civil, administrative, and fraud prevention actions. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 87 | 75 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$5,542.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support and benefit costs.

- (-$9,274.0/ -66.6 FTE) This program change is a reduction which will focus the amount of audits, program evaluations and investigative case work on the highest priority work to ensure the protection of critical environmental resources and the health and safety of the American people.

**Statutory Authority:**

Inspector General Act, as amended; Inspector General Reform Act.

**Inspector General Reform Act:**

The following information is provided pursuant to the requirements of the Inspector General Reform Act:

- the aggregate budget request from the Inspector General for the operations of the OIG is $62 million ($53 million Inspector General; $9 million Superfund Transfer);
- the aggregate President's Budget for the operations of the OIG is $46.2 million ($37.5 million Inspector General; $8.7 million Superfund Transfer);
- the portion of the aggregate President's Budget needed for training is $700 thousand ($574 thousand Inspector General; $126 thousand Superfund Transfer);
- the portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is $179 thousand ($143.2 thousand Inspector General; $35.8 thousand Superfund Transfer).

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2019".

## Table of Contents – Buildings and Facilities

**APPROPRIATION: Building and Facilities**

## Resource Summary Table

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Building and Facilities** | | | | |
| Budget Authority | $32,184.7 | $34,233.0 | $39,553.0 | $5,320.0 |
| Total Workyears | 0.0 | 0.0 | 0.0 | 0.0 |

## Bill Language: Buildings and Facilities

*For construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities of, or for use by, the Environmental Protection Agency, $39,553,000, to remain available until expended.*

## Program Projects in B&F

(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Homeland Security | | | | |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $6,119.2 | $6,631.0 | $6,176.0 | -$455.0 |
| Operations and Administration | | | | |
| Facilities Infrastructure and Operations | $26,065.5 | $27,602.0 | $33,377.0 | $5,775.0 |
| **TOTAL B&F** | **$32,184.7** | **$34,233.0** | **$39,553.0** | **$5,320.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Homeland Security

## Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $4,918.0 | $5,336.0 | $4,986.0 | -$350.0 |
| Science & Technology | $438.0 | $446.0 | $500.0 | $54.0 |
| ***Building and Facilities*** | ***$6,119.2*** | ***$6,631.0*** | ***$6,176.0*** | ***-$455.0*** |
| Hazardous Substance Superfund | $1,306.2 | $934.0 | $934.0 | $0.0 |
| Total Budget Authority | $12,781.4 | $13,347.0 | $12,596.0 | -$751.0 |
| Total Workyears | 5.9 | 12.2 | 12.2 | 0.0 |

### Program Project Description:

This program supports the protection of federal employees, contractors, grantees, and private citizens (occupants) who work within or visit EPA facilities. EPA occupies spaces nationwide. EPA's buildings are a combination of headquarters and regional administrative offices, program and research laboratories, and support facilities/warehouses. These facilities are either EPA owned/leased or GSA owned/leased. This funding ensures federal mandates are met as they relate to physical security and local emergency preparedness for our locations nationwide. These funds support the physical security protection equipment and mechanisms required to protect occupants during facility relocation (e.g., moves, new leases, consolidations, etc.), physical equipment upgrades/modernization, or corrective actions required to address security vulnerabilities identified during security assessments.

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will ensure the following security projects protect occupants and comply with federal mandates for physical security: (1) relocation of Criminal Investigation Division offices in San Diego, Dallas, Philadelphia, Denver, and Baton Rouge; (2) consolidation of the Corvallis, Willamette and Richmond labs; (3) incorporate Helena office into the Region 8 Physical Access Controls System; (4) consolidate San Francisco's COOP and Emergency Response equipment; (5) fund the first phase of the design of the new entrance for Athens, Georgia; and (6) various closed circuit television and physical security upgrades in response to vulnerabilities identified by previously conducted physical security assessments.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$455.0) This program change will extend the schedule for moving the facility Physical Access Control Systems to an enterprise ePAC solution.

**Statutory Authority:**

Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Operations and Administration

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $293,997.9 | $305,844.0 | $300,738.0 | -$5,106.0 |
| Science & Technology | $64,642.7 | $67,875.0 | $68,834.0 | $959.0 |
| ***Building and Facilities*** | ***$26,065.5*** | ***$27,602.0*** | ***$33,377.0*** | ***$5,775.0*** |
| Leaking Underground Storage Tanks | $502.2 | $793.0 | $773.0 | -$20.0 |
| Inland Oil Spill Programs | $376.2 | $580.0 | $665.0 | $85.0 |
| Hazardous Substance Superfund | $69,651.3 | $75,985.0 | $74,144.0 | -$1,841.0 |
| Total Budget Authority | $455,235.8 | $478,679.0 | $478,531.0 | -$148.0 |
| Total Workyears | 323.4 | 356.7 | 318.0 | -38.7 |

## Program Project Description:

EPA's Buildings and Facilities (B&F) appropriation supports the design, construction, repair, and improvement of EPA's federally owned and leased land and structures in accordance with applicable codes and standards. Construction renovation and alteration projects costing more than $150 thousand must use B&F funding.

B&F resources ensure that the Agency complies with various mandates and goals including: the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 (EISA), Executive Order (EO) 13693,[1] *Planning for Federal Sustainability in the Next Decade,* and regulatory mandates associated with soil and water pesticides testing.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In accordance with the National Strategy for the Efficient Use of Real Property 2015-2020 and HR 4465,[2] the *Federal Assets Sale and Transfer Act of 2016*, the Agency will continue to review its space needs. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical. B&F resources support facility-related construction and the repair and improvement (R&I) of EPA's aging real estate inventory. Good stewardship practices demand that the physical conditions, functionality, safety and health, security, and research capabilities of the Agency's facilities are adequately maintained to ensure

[1] For additional information, refer to: https://www.fedcenter.gov/programs/eo13693/.
[2] For additional information, refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016.*

successful completion of EPA's mission requirements and goals. Timely repairs save resources in the longer term.

Through master planning and nationwide efforts to use space more efficiently, EPA identifies B&F projects to be conducted each fiscal year. Necessary projects usually exceed the amount of funding available and nearly every project is important to the long-term condition or efficiency of the buildings. Further, the need for B&F resources will continue to increase in order to comply with GSA leasing practices requiring agencies to pay for B&F projects including sustainable features[3] as tenant improvements (TI) or up front and ongoing project costs.

This requirement significantly increases TI cost for new leases at the same time that resources are needed to consolidate space and move into new locations to reduce the Agency's footprint in accordance with the *Federal Asset Sale and Transfer Act of 2016*.

In FY 2019, the Agency will continue to explore opportunities to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. During FY 2019, space consolidation (i.e. releasing floors or portions of leased space) in Regions 2, 3, 6 and 8 will cumulatively release over 226,000 square feet and save approximately $7.8 million in rent. Space consolidation and reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires B&F funding.

The FY 2019 request also includes resources for ongoing projects that will provide critical maintenance for aging laboratory facilities and are key to ensuring that the Agency has access to preeminent laboratory science. These projects maintain a safe workplace, provide for high quality science, support agency priorities, and advance the Agency's mission. Delaying essential repairs results in the deterioration of EPA's facilities, which increases long-term repair costs and presents safety risks.

In line with the Laboratory Study completed in 2014, EPA will focus on facility repairs in those laboratories that are critical to the Agency's mission. These labs will need infrastructure upgrades to maintain an acceptable Facility Condition Index and to allow for potential future consolidations from leased facilities.

In FY 2019, the Agency proposes to continue or initiate space optimization projects with the potential for the greatest long-term cost and energy savings, including but not limited to the following:

- **Optimizing space at the Athens, GA laboratory.** EPA continues its work to consolidate employees in leased laboratory space into owned space. Prior to optimizing the Agency's space footprint in Athens, however, EPA must first invest in the design for the optimized layout. The EPA requests $4 million in FY 2019 for this design work, which must occur prior to any space optimization work.

[3] Many of these features are required by EISA or executive orders.

- **Willamette Consolidation to the Corvallis laboratory.** Before EPA consolidates the Willamette laboratory, the Agency is in the process of modifying swing space in Corvallis, OR to accommodate employees from Willamette, OR while the main infrastructure replacement project is underway. This project will reduce the space footprint by 20,918 rentable square feet.

- **Grosse Ile to the National Vehicle Fuel and Emissions laboratory**. EPA will move staff into the owned laboratory facility in Ann Arbor, Michigan. The Agency must modify space at the Ann Arbor laboratory to accommodate staff from Grosse Ile, MI. Release of the Grosse Ile facility will result in a space reduction of approximately 35,000 square feet.

In FY 2019, EPA will continue its phased approach to accomplish major B&F projects across the country involving mechanical systems nearing the end of their useful life that also will ultimately result in energy savings. A few examples are listed below.

- **Replacement of air handlers at the Air and Radiation laboratory, Montgomery, AL, Phase 3.** This phase of the project will replace the air handler systems within the laboratory and complete the infrastructure replacement project. The timeline for Phase 2 was extended, moving Phase 3 into FY 2019. This investment, which will produce energy and related resource savings, represents a major priority as it is necessary to maintain operability at the Montgomery, AL laboratory.

- **Implementation of Phase 2 of the Infrastructure Replacement Project at the Research and Development laboratory in Corvallis, OR.** Phase 2 construction will continue in FY 2019 to renovate the laboratory and consolidate a portion of the Region 9 laboratory's functions. The laboratory renovation will result in a reduction in energy consumption, which will lead to utility cost avoidance. New energy efficient equipment, procedures, and methods will incorporate reliability, sustainability, and safety while meeting mission requirements.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$5,775.0) This program change increases funding for the Agency's planned progress in regional space optimization and laboratory upgrade projects in Athens, GA, Corvallis, OR and Gross Ile, MI.

**Statutory Authority:**

Federal Property and Administration Services Act; Public Building Act; Robert T. Stafford Disaster Relief and Emergency Assistance Act; Clean Water Act; Clean Air Act; Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Community Environmental Response Facilitation Act

(CERFA); Energy Policy Act of 2005; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Environmental Protection Agency**
**2019 Annual Performance Plan and Congressional Justification**

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**Environmental Protection Agency**
**FY 2019 Annual Performance Plan and Congressional Justification**

## APPROPRIATION: Hazardous Substance Superfund
## Resource Summary Table

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Hazardous Substance Superfund** | | | | |
| Budget Authority | $1,144,699.4 | $1,081,374.0 | $1,088,830.0 | $7,456.0 |
| Total Workyears | 2,643.4 | 2,663.6 | 2,590.6 | -73.0 |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

## Bill Language: Hazardous Substance Superfund

*For necessary expenses to carry out the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including sections 111(c)(3), (c)(5), (c)(6), and (e)(4) (42 U.S.C. 9611), $1,088,830,000, to remain available until expended, consisting of such sums as are available in the Trust Fund on September 30, 2018, as authorized by section 517(a) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and up to $1,088,830,000 as a payment from general revenues to the Hazardous Substance Superfund for purposes as authorized by section 517(b) of SARA: Provided, That funds appropriated under this heading may be allocated to other Federal agencies in accordance with section 111(a) of CERCLA: Provided further, That of the funds appropriated under this heading, $8,718,000 shall be paid to the "Office of Inspector General" appropriation to remain available until September 30, 2020, and $17,398,000 shall be paid to the "Science and Technology" appropriation to remain available until September 30, 2020.*

## Program Projects in Superfund

(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Indoor Air and Radiation | | | | |
| Radiation: Protection | $1,833.6 | $1,972.0 | $1,972.0 | $0.0 |
| Audits, Evaluations, and Investigations | | | | |
| Audits, Evaluations, and Investigations | $9,156.4 | $8,718.0 | $8,718.0 | $0.0 |
| Compliance | | | | |
| Compliance Monitoring | $1,028.8 | $988.0 | $988.0 | $0.0 |
| Enforcement | | | | |
| Criminal Enforcement | $6,815.3 | $7,135.0 | $7,135.0 | $0.0 |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Justice | $732.9 | $554.0 | $0.0 | -$554.0 |
| Forensics Support | $1,543.6 | $1,097.0 | $1,097.0 | $0.0 |
| Superfund: Enforcement | $153,706.0 | $150,466.0 | $150,466.0 | $0.0 |
| Superfund: Federal Facilities Enforcement | $5,594.9 | $5,993.0 | $5,993.0 | $0.0 |
| Subtotal, Enforcement | $168,392.7 | $165,245.0 | $164,691.0 | -$554.0 |
| Homeland Security | | | | |
| Homeland Security: Preparedness, Response, and Recovery | $33,899.4 | $31,461.0 | $31,752.0 | $291.0 |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $1,306.2 | $934.0 | $934.0 | $0.0 |
| Subtotal, Homeland Security | $35,205.6 | $32,395.0 | $32,686.0 | $291.0 |
| Information Exchange / Outreach | | | | |
| Exchange Network | $1,316.3 | $1,319.0 | $1,319.0 | $0.0 |
| IT / Data Management / Security | | | | |
| Information Security | $654.9 | $666.0 | $5,186.0 | $4,520.0 |
| IT / Data Management | $14,691.5 | $13,720.0 | $13,720.0 | $0.0 |
| Subtotal, IT / Data Management / Security | $15,346.4 | $14,386.0 | $18,906.0 | $4,520.0 |
| Legal / Science / Regulatory / Economic Review | | | | |
| Alternative Dispute Resolution | $591.3 | $667.0 | $0.0 | -$667.0 |
| Legal Advice: Environmental Program | $691.2 | $577.0 | $577.0 | $0.0 |
| Subtotal, Legal / Science / Regulatory / Economic Review | $1,282.5 | $1,244.0 | $577.0 | -$667.0 |
| Operations and Administration | | | | |
| Central Planning, Budgeting, and Finance | $22,511.4 | $21,345.0 | $21,152.0 | -$193.0 |
| Facilities Infrastructure and Operations | $69,651.3 | $75,985.0 | $74,144.0 | -$1,841.0 |
| Acquisition Management | $22,103.1 | $21,296.0 | $21,296.0 | $0.0 |
| Human Resources Management | $5,380.1 | $5,997.0 | $5,497.0 | -$500.0 |
| Financial Assistance Grants / IAG Management | $2,997.4 | $2,611.0 | $2,611.0 | $0.0 |
| Subtotal, Operations and Administration | $122,643.3 | $127,234.0 | $124,700.0 | -$2,534.0 |
| Research: Sustainable Communities | | | | |
| Research: Sustainable and Healthy Communities | $12,717.6 | $11,385.0 | $10,885.0 | -$500.0 |
| Research: Chemical Safety and Sustainability | | | | |
| Human Health Risk Assessment | $3,020.5 | $2,805.0 | $5,021.0 | $2,216.0 |
| Superfund Cleanup | | | | |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Superfund: Emergency Response and Removal | $198,324.0 | $180,075.0 | $181,306.0 | $1,231.0 |
| Superfund: EPA Emergency Preparedness | $7,174.6 | $7,584.0 | $7,584.0 | $0.0 |
| Superfund: Federal Facilities | $22,434.2 | $20,982.0 | $20,982.0 | $0.0 |
| Superfund: Remedial | $544,822.9 | $505,042.0 | $508,495.0 | $3,453.0 |
| Subtotal, Superfund Cleanup | $772,755.7 | $713,683.0 | $718,367.0 | $4,684.0 |
| **TOTAL Superfund** | **$1,144,699.4** | **$1,081,374.0** | **$1,088,830.0** | **$7,456.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Indoor Air and Radiation

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $7,780.1 | $8,519.0 | $2,000.0 | -$6,519.0 |
| Science & Technology | $2,328.6 | $1,996.0 | $1,000.0 | -$996.0 |
| ***Hazardous Substance Superfund*** | ***$1,833.6*** | ***$1,972.0*** | ***$1,972.0*** | ***$0.0*** |
| Total Budget Authority | $11,942.3 | $12,487.0 | $4,972.0 | -$7,515.0 |
| Total Workyears | 58.9 | 59.1 | 25.0 | -34.1 |

**Program Project Description:**

This program addresses potential radiation risks found at some Superfund and hazardous waste sites. Through this program, EPA ensures that Superfund site cleanup activities reduce and/or mitigate the health and environmental risk of radiation to include support of removal actions as needed.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA's National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada, will continue to provide analytical and field support to manage and mitigate radioactive releases and exposures. These two organizations provide analytical and technical support for the characterization and cleanup of Superfund and Federal Facility sites. Support focuses on providing high quality data to support agency decisions at sites across the country.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

# Audits, Evaluations, and Investigations

**Audits, Evaluations, and Investigations**
Program Area: Audits, Evaluations, and Investigations
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Inspector General | $41,053.7 | $41,207.0 | $37,475.0 | -$3,732.0 |
| ***Hazardous Substance Superfund*** | ***$9,156.4*** | ***$8,718.0*** | ***$8,718.0*** | ***$0.0*** |
| Total Budget Authority | $50,210.1 | $49,925.0 | $46,193.0 | -$3,732.0 |
| Total Workyears | 266.0 | 318.1 | 242.0 | -76.1 |

## Program Project Description:

EPA's Office of Inspector General (OIG) provides audit, program evaluation, investigative services and products that fulfill the requirements of the Inspector General Act, as amended, by identifying fraud, waste, and abuse in agency, grantee and contractor operations, and by promoting economy, efficiency, and effectiveness in the operations of the Agency's Superfund program. Although the OIG is a part of EPA, to ensure its independence, as specified in the IG Act (as amended), the OIG is funded with a separate appropriation within the Agency. The OIG activities add value and enhance public trust and safety by providing the Agency, the public, and Congress with independent analyses and recommendations that help EPA management resolve risks and challenges, achieve opportunities for savings, and implement actions for safeguarding EPA resources and accomplishing EPA's environmental goals. The OIG activities also prevent and detect fraud in EPA's programs and operations, including financial fraud, laboratory fraud, and cybercrime. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity. The audit, program evaluation, inspection and investigative services programs are directly supported through the OIG's management and administrative functions of information technology, human resources, human capital, budget, planning and performance, legal advice and counseling, report publishing and communications, and congressional outreach.

## FY 2019 Activities and Performance Plan:

EPA's OIG will assist the Agency in its efforts to reduce environmental and human health risks by making recommendations to improve Superfund program operations; save taxpayer dollars, reduce the potential for fraud, waste and abuse; respond to cybercrimes; and resolve previously identified major management challenges and internal control weaknesses. In FY 2019, the OIG will continue recommending improvements to operating efficiency, transparency, secured and trustworthy systems, and the cost effective attainment of EPA's strategic goals and positive environmental impacts related to the Superfund program.

The OIG's plans will continue to be implemented through audits, evaluations, investigations, inspections, and follow-up reviews in compliance with the Inspector General Act (as amended), applicable professional standards of the U. S. Comptroller General, and the Quality Standards for Federal Offices of Inspector General of the Council of Inspectors General on Integrity and Efficiency.

The OIG will conduct the following types of assignments focused on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, program performance evaluations will be conducted in the areas of EPA's mission objectives for improving and protecting the environment and public health via reviews of Superfund and other land issues.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA's Superfund program and operations that undermine the organization's integrity and public trust, or create an imminent risk or danger. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations often lead to successful prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Major areas of investigative focus include: financial fraud, program integrity, threats to the Agency's resources, employee integrity, cybercrimes, and theft of intellectual or sensitive data.

**Audits and Evaluations**

The OIG audits and program evaluations and inspections related to Superfund will identify program and management risks and determine if EPA is efficiently and effectively reducing human health risks; taking effective enforcement actions; cleaning up hazardous waste; managing waste, restoring previously polluted sites to appropriate uses; and ensuring long-term stewardship of polluted sites. The OIG assignments will include: assessing the adequacy of internal controls in EPA and its grantees and contractors to protect resources and achieve program results; project management to ensure that EPA and its grantees and contractors have clear plans and accountability for performance progress; enforcement to evaluate whether there is consistent, adequate and appropriate application of the laws and regulations across jurisdictions with coordination between federal, state, and local law enforcement activities; and grants and contracts to verify that such awards are made based upon uniform risk assessment, and that grantees and contractors perform with integrity.

The OIG will concentrate its resources on efforts in the following assignment areas:

- Human and Environmental Exposure from Superfund Site Contaminants.
- Optimization of Superfund financed clean-up remedies.
- EPA's progress in ensuring private party Superfund liabilities are adequately covered by sufficient financial assurance mechanisms.
- EPA Progress Implementing Recommendations for Superfund Improvement in the 2017 Superfund Task Force Report.

- Superfund portion of EPA's financial statement and FISMA audits to include sampling, monitoring, communication and opportunities for cleanup efficiencies.
- Oversight of Superfund remedial activities under state contracts and assistance agreements.
- Assess the effectiveness of actions taken as a result of the 2017 Superfund Task Force Report.
- The OIG also will evaluate ways to minimize fraud, waste, and abuse, with emphasis on identifying opportunities for cost savings and reducing risk of resource loss, while maximizing results achieved from Superfund contracts and assistance agreements.

**Investigations**

The Office of Investigations (OI) mission is to conduct criminal, civil, and administrative investigations of fraud, waste and abuse and serious misconduct within EPA's Superfund Program. OI investigations are worked in conjunction with the U.S. Department of Justice, as well as state and local prosecutors, for criminal and civil litigation or with EPA management for administrative action. OI currently investigates the following: 1) fraudulent practices in awarding, performing, and paying Superfund contracts, grants, or other assistance agreements; 2) program fraud or other acts that undermine the integrity of, or confidence in the Superfund program and create imminent environmental risks; 3) laboratory fraud relating to data, and false claims or erroneous laboratory results that undermine the basis for decision-making, regulatory compliance, or enforcement actions in the Superfund program; 4) violent or criminal threats directed against Superfund program employees or facilities; 5) criminal conduct or serious administrative misconduct by EPA employees involved in the Superfund program; and 6) intrusions into and attacks against EPA's network supporting Superfund program data, as well as incidents of computer misuse and theft of intellectual property or sensitive/proprietary Superfund data. Special attention will be directed towards identifying the tactics, techniques, and procedures that are being utilized by cybercriminals to obtain Superfund program information.

Finally, OI often makes observations or "lessons learned" for EPA's management which works on the Superfund program to reduce the Agency's vulnerability to criminal activity. The results of OI's investigations are published and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved and administrative actions are taken to prevent those involved from further participation in any Superfund program or operation.

**Follow-up and Policy/Regulatory Analysis**

To further promote economy, efficiency and effectiveness, the OIG will conduct follow-up reviews of agency responsiveness to the OIG recommendations for the Superfund program to determine if appropriate actions have been taken, and intended improvements have been achieved. This process will serve as a means to keep Congress and EPA leadership apprised of accomplishments, and opportunities for needed corrective actions, and will facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act (as amended), the OIG also conducts reviews and analysis of proposed and existing policies, rules, regulations and legislation pertaining to the Superfund

program to identify vulnerability to waste, fraud and abuse. These reviews also consider possible duplication, gaps or conflicts with existing authority, leading to recommendations for improvements in their structure, content and application.

**Performance Measure Targets:**

Work under this program supports performance results in the Audits, Evaluations, and Investigations program under the IG Appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-9.5 FTE) This program change is a reduction which will focus the amount of audits, program evaluations, and investigative case work.

**Statutory Authority:**

Inspector General Act, as amended; Inspector General Reform Act; Comprehensive Environmental Response, Compensation, and Liability Act § 111(k).

**Inspector General Reform Act:**

The following information is provided pursuant to the requirements of the Inspector General Reform Act:

- the aggregate budget request from the Inspector General for the operations of the OIG is $62 million ($53 million Inspector General; $9 million Superfund Transfer);
- the aggregate President's Budget for the operations of the OIG is $46.2 million ($37.5 million Inspector General; $8.7 million Superfund Transfer);
- the portion of the aggregate President's Budget needed for training is $700 thousand ($574 thousand Inspector General; $126 thousand Superfund Transfer);
- the portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is $179 thousand ($143.2 thousand Inspector General; $35.8 thousand Superfund Transfer).

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2019".

# Compliance

**Compliance Monitoring**
Program Area: Compliance
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $98,283.6 | $100,975.0 | $86,374.0 | -$14,601.0 |
| Inland Oil Spill Programs | $145.2 | $138.0 | $0.0 | -$138.0 |
| ***Hazardous Substance Superfund*** | ***$1,028.8*** | ***$988.0*** | ***$988.0*** | ***$0.0*** |
| Total Budget Authority | $99,457.6 | $102,101.0 | $87,362.0 | -$14,739.0 |
| Total Workyears | 506.4 | 538.9 | 428.7 | -110.2 |

## Program Project Description:

The Compliance Monitoring program is a key component of EPA's compliance assurance program that allows the controlling regulatory authority to detect noncompliance and promotes compliance with the nation's environmental laws. The states and EPA use compliance monitoring tools and activities to identify whether regulated entities are in compliance with environmental laws enacted by Congress, as well as applicable regulations and permit conditions. In addition, compliance monitoring activities, such as inspections and investigations, are conducted to determine whether conditions exist that may present imminent and substantial endangerment to human health and the environment. The program focuses on providing information and system support for monitoring compliance with Superfund-related environmental regulations and contaminated site cleanup agreements. The Agency also ensures the security and integrity of its compliance information systems. Superfund-related regulatory enforcement program activities are tracked in the Agency's Integrated Compliance Information System (ICIS).

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to streamline its Superfund-related compliance monitoring activities. EPA will support a variety of tools and activities for states and EPA to identify the compliance status of regulated entities with environmental laws enacted by Congress, as well as applicable regulations, permit conditions, and compliance with Federal Facility Agreements. Additionally, EPA will conduct inspections and investigations to evaluate the risk of imminent and substantial endangerment to human health and the environment.

## Performance Measure Targets:

Work under this program supports performance results in the Compliance Monitoring program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Enforcement

**Criminal Enforcement**
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $48,039.2 | $45,333.0 | $41,107.0 | -$4,226.0 |
| ***Hazardous Substance Superfund*** | ***$6,815.3*** | ***$7,135.0*** | ***$7,135.0*** | ***$0.0*** |
| Total Budget Authority | $54,854.5 | $52,468.0 | $48,242.0 | -$4,226.0 |
| Total Workyears | 237.9 | 268.6 | 209.6 | -59.0 |

## Program Project Description:

The Criminal Enforcement program investigates and helps prosecute violations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice. EPA's criminal enforcement agents (Special Agents) do this through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment.

Within the Criminal Enforcement program, forensic scientists, attorneys, technicians, engineers, and other program experts assist Special Agents. EPA's criminal enforcement attorneys provide legal and policy support for all of the program's responsibilities, including forensics and expert witness preparation, information law, and personnel law to ensure that program activities are carried out in accordance with legal requirements and agency policies. These efforts support environmental crimes prosecutions primarily by the United States Attorneys and the Department of Justice's Environmental Crimes Section. In FY 2017, the conviction rate for criminal defendants was 91 percent.[1]

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to streamline its Criminal Enforcement program and enforce environmental laws to correct noncompliance and promote cleanup of contaminated sites. The Agency will perform targeted investigations of violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment. The program will focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load.

[1] For additional information, refer to: http://www.epa.gov/enforcement/data-and-results.

**Performance Measure Targets:**

Work under this program supports performance results in the Criminal Enforcement program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, §120; Title 18 of the U.S.C.

**Forensics Support**
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Science & Technology | $13,228.8 | $13,576.0 | $10,486.0 | -$3,090.0 |
| ***Hazardous Substance Superfund*** | ***$1,543.6*** | ***$1,097.0*** | ***$1,097.0*** | ***$0.0*** |
| Total Budget Authority | $14,772.4 | $14,673.0 | $11,583.0 | -$3,090.0 |
| Total Workyears | 73.6 | 80.3 | 52.1 | -28.2 |

## Program Project Description:

The Forensics Support program provides expert scientific and technical support for Superfund civil and criminal enforcement cases, as well as technical expertise for agency compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences.[2] The NEIC maintains a sophisticated chemistry laboratory and a corps of highly trained inspectors and scientists with expertise across media. The NEIC works closely with EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation and testimony) to criminal investigations. The NEIC also works closely with EPA's Headquarters and Regional Offices to provide technical assistance, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Superfund Enforcement program.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the NEIC will continue to streamline its forensics work and identify enhancements to our sampling and analytical methods, using existing technology. The program will continue to focus its work on collecting and analyzing materials in order to attribute contamination to individual sources/facilities. In providing support for the Superfund program, the Forensics Support program will coordinate its efforts with Superfund support efforts of the Agency's Research and Development and the Office of Land and Emergency Management programs. The Forensics Support program will continue to provide expert scientific and technical support for EPA's criminal and civil enforcement efforts.

[2] Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, 2009, available at http://www.nap.edu/catalog.php?record_id=12589.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-0.5 FTE) This program change reflects a focus on analyzing material to attribute it to individual sources or facilities and a reduction in other lab support.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Emergency Planning and Community Right-to-Know Act (EPCRA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Superfund: Enforcement**
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Hazardous Substance Superfund*** | ***$153,706.0*** | ***$150,466.0*** | ***$150,466.0*** | ***$0.0*** |
| Total Budget Authority | $153,706.0 | $150,466.0 | $150,466.0 | $0.0 |
| Total Workyears | 729.0 | 771.3 | 745.3 | -26.0 |

## Program Project Description:

The Superfund Enforcement program protects communities by ensuring that responsible parties conduct cleanups, preserving federal dollars for sites where there are no viable contributing parties. EPA's Superfund Enforcement program ensures prompt site cleanup and reuse by maximizing the participation of liable and viable parties in performing and paying for cleanups. In both the Superfund Remedial and Superfund Emergency Response and Removal programs, the Superfund Enforcement program obtains potentially responsible parties' commitments to perform and pay for cleanups through civil, judicial, and administrative site actions. The Superfund Enforcement program works closely with the Superfund program and the Department of Justice (DOJ) to combine litigation, legal, and technical skills to bring enforcement actions and address emerging issues.

The Superfund Enforcement program:

- develops hazardous waste cleanup enforcement policies;
- provides guidance and tools that clarify potential environmental cleanup liability, with specific attention to the cleanup, reuse and revitalization of contaminated properties;
- ensures that responsible parties cleanup sites to reduce direct human exposure to hazardous substances, thereby providing long-term human health protections and making contaminated properties available for reuse;
- negotiates cleanup agreements with Potentially Responsible Parties (PRPs) at hazardous waste sites and, where negotiations fail, either initiates enforcement actions to require cleanup or initiates cost recovery if EPA expends Superfund appropriated dollars to remediate the sites; and
- addresses liability concerns of parties who want to cleanup and reuse Superfund sites.

EPA, through the Superfund Task Force, is working to improve and revitalize the Superfund program to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial use as expeditiously as possible. The Superfund enforcement program is the lead for many of the Task Force's 42 recommendations and will work to encourage and facilitate PRPs' expeditious and thorough cleanup of sites, create

oversight efficiencies and promote the redevelopment and reuse of sites by encouraging PRPs to invest in reuse outcomes. In addition, the enforcement program will work to encourage private investment in the cleanup and reuse of sites by optimizing tools and realigning incentives to encourage third-party investment. EPA also works to ensure that required legally enforceable institutional controls and financial assurance requirements are in place at Superfund sites to ensure the long-term protectiveness of Superfund cleanup remedies.

In FY 2017, EPA reached a settlement or took an enforcement action at 100 percent of non-federally owned Superfund sites with viable, liable parties before the start of an FY 2017 remedial action.[3] In FY 2017, the Superfund Enforcement program secured private party commitments exceeding $1.46 billion.

Special accounts are created when funds are received as part of a settlement to fund a site cleanup. Funds received in settlements with PRPs are used to clean up the specific Superfund sites that were the subject of the settlement agreement. Having the ability to use special accounts provides needed cleanup dollars at many sites that otherwise may not have received funding absent EPA's enforcement efforts. In FY 2017, EPA created 52 special accounts and collected $289.4 million for response work.[4] The Agency disbursed or obligated $340.3 million from special accounts for response work (excluding reclassifications).

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the Agency will prioritize its efforts on the most significant sites in terms of environmental impact (particularly those that may present an immediate risk) and on increasing private party funding of cleanups. The Agency will continue its efforts to establish special accounts to facilitate cleanup. As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and annually appropriated resources are critical to the Superfund program to clean up Superfund sites.

DOJ support is statutorily mandated for settlements related to remedial action cleanups, most cost recovery settlements, and is required for all judicial enforcement matters. DOJ's support will be prioritized to negotiate and enter consent decrees with PRPs to perform remedial actions, to pursue judicial actions to compel PRP cleanup, and to pursue judicial actions to recover monies spent in cleaning up contaminated sites.

*Cost Recovery Support*

The Agency will streamline the financial management aspects of Superfund cost recovery and the collection of related debt to the federal government. EPA's financial, programmatic, and legal offices will continue to maintain the accounting and billing of Superfund oversight costs attributable to responsible parties. These costs represent EPA's cost of overseeing Superfund site cleanup efforts by responsible parties as stipulated in the terms of settlement agreements. In FY 2017, the Agency collected $232.3 million in cost recoveries, of which $49.4 million were returned

[3] For additional information, refer to: https://www.epa.gov/enforcement/data-and-results.
[4] In addition, in FY 2017, $38.5 million in interest was earned on the special account funds invested in the Superfund Trust Fund.

to the Superfund Trust Fund and $182.9 million were deposited in site-specific, interest bearing special accounts.

**Performance Measure Targets:**

| (435) Number of potentially responsible party (PRP) and other party commitments to perform or pay for cleanup and/or reuse of contaminated sites. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 110 | 110 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-26.0 FTE) This program change reflects a focus on sites with significant risks and securing private party funding for cleanups and a reduction in resources for Superfund cost recovery, to be offset in part by streamlining those functions. Personnel cost reductions associated with this shift in FTE are offset by fixed and other workforce cost increases in the program.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, §120.

**Environmental Justice**
Program Area: Enforcement
Goal: Cooperative Federalism
Objective(s): Increase Transparency and Public Participation

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $6,401.5 | $6,691.0 | $2,000.0 | -$4,691.0 |
| ***Hazardous Substance Superfund*** | ***$732.9*** | ***$554.0*** | ***$0.0*** | ***-$554.0*** |
| Total Budget Authority | $7,134.4 | $7,245.0 | $2,000.0 | -$5,245.0 |
| Total Workyears | 34.9 | 40.3 | 0.0 | -40.3 |

## Program Project Description:

EPA's Environmental Justice program fosters environmental and public health and sustainability in communities disproportionately burdened by pollution by integrating and addressing issues of environmental justice in our programs and policies. The Superfund portion of the program focuses on issues that affect low income and minority communities at or near Superfund sites. The Environmental Justice program complements the Agency's community outreach and other work done under the Superfund program at affected sites.

## FY 2019 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2019. EJ work impacting the entire Agency will be incorporated into policy work within the Office of Policy, which is a part of EPA's Office of the Administrator.

## Performance Measure Targets:

Currently there are no performance measures specific to this program.

## FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (-$554.0/ -3.5 FTE) This change proposes to eliminate Superfund funding for the Environmental Justice program. Environmental Justice is proposed for transfer from the Office of Enforcement and Compliance Assurance to the Agency's Office of Policy which will continue to support Environmental Justice efforts in EPA program offices. The Office of Policy can ensure integration across the full range of EPA's programs.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended.

**Superfund: Federal Facilities Enforcement**
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Hazardous Substance Superfund*** | ***$5,594.9*** | ***$5,993.0*** | ***$5,993.0*** | ***$0.0*** |
| Total Budget Authority | $5,594.9 | $5,993.0 | $5,993.0 | $0.0 |
| Total Workyears | 30.6 | 40.9 | 37.4 | -3.5 |

## Program Project Description:

EPA's Superfund Federal Facilities Enforcement program ensures that sites where federal entities are performing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) responses and/or CERCLA sites with federal ownership are monitored and that appropriate enforcement responses are pursued. After years of service and operation, some federal facilities contain environmental contamination such as hazardous wastes, unexploded ordnance, radioactive wastes, or other toxic substances. Enforcement actions can facilitate cleanup and potential redevelopment of these sites.

Pursuant to CERCLA Section 120, EPA must enter into Interagency Agreements, also commonly referred to as Federal Facility Agreements (FFAs), with responsible federal entities to ensure protective and timely cleanup of their National Priorities List (NPL) sites. The agreements provide that EPA oversee the cleanups to ensure that they protect public health and the environment. These FFAs govern cleanups at 174 federal facility Superfund sites, which include many of the Nation's largest and most complex cleanup projects.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will focus its resources on the highest priority sites, particularly those that may present an imminent and/or substantial endangerment; negotiate FFAs for federal facility sites on the NPL; monitor FFAs for compliance and resolve formal disputes; take enforcement actions at priority sites; and implement the Superfund Task Force recommendations to expedite cleanup and redevelopment of federal facility sites.

## Performance Measure Targets:

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-3.5 FTE) This program change reflects a focus on high priority sites and a greater reliance on self-monitoring by other federal agencies at low priority sites.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, §120.

# Homeland Security

**Homeland Security: Preparedness, Response, and Recovery**
Program Area: Homeland Security
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Science & Technology | $23,161.0 | $23,298.0 | $22,461.0 | -$837.0 |
| ***Hazardous Substance Superfund*** | ***$33,899.4*** | ***$31,461.0*** | ***$31,752.0*** | ***$291.0*** |
| Total Budget Authority | $57,060.4 | $54,759.0 | $54,213.0 | -$546.0 |
| Total Workyears | 128.9 | 127.4 | 127.1 | -0.3 |

## Program Project Description:

EPA leads or supports many aspects of preparing for and responding to a nationally significant incident involving possible chemical, biological, radiological and nuclear (CBRN) agents.

The Homeland Security Preparedness, Response, and Recovery program implements a broad range of activities for a variety of federal efforts, including national trainings; participation in national interagency exercises with federal and state partners; support for headquarters and regional Emergency Operations Centers; support for the Agency's continuity of operations devolution site in EPA's Colorado office; enhancements for national information technology systems; secured warehouse space for homeland security operations and storage; and laboratory analysis of environmental samples and site decontamination projects. EPA's homeland security effort develops these responsibilities through research and maintaining a level of expertise, training, and preparedness specifically focused on threats associated with CBRN. This work is consistent with the Department of Homeland Security's (DHS) National Response Framework (NRF).

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the Homeland Security Preparedness, Response, and Recovery Program will:

- Participate with federal response partners (such as DHS, the Department of Defense, and the Department of Justice) on select interagency workgroups;
- Operate the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft. ASPECT provides assistance to first responders by detecting chemical and radiological vapors, plumes, and clouds with real-time data delivery;
- Maintain mobile lab capabilities with support of EPA's Portable High-Throughput Integrated Identification Systems (PHILIS) units. PHILIS can be deployed to sites for high volume, quick turnaround analyses of chemical and biological capacity and capability;

- Provide expertise on environmental characterization, decontamination, and waste disposal methods following the release of a CBRN agent;
- Participate in trainings and exercises on CBRN preparedness and response topics;
- Maintain operational support for the Emergency Management Portal and *WebEOC* response systems;
- Develop more effective site characterization, decontamination, waste management, and clearance strategies for site reoccupation for priority chemical, biological, and radiological threats to reduce time and cost for remediation; and
- Continue development of sample collection protocols and analysis methods for inclusion in the Selected Analytical Methods for Environmental Remediation and Recovery (SAM), a compendium of methods and supporting sampling documents. The SAM provides responders and Environmental Response Lab Networks the single best available sample collection and analysis method.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$40.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (+$251.0) This program change is an increase to research related to analysis of chemical agents, decision support for chemical agent remediation, fate and transport of chemical, biological, or radiological (CBR) agents in the environment as well as research related to the treatment of decontamination wash water.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, and 106; Clean Water Act; Oil Pollution Act; Homeland Security Act of 2002.

## Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $4,918.0 | $5,336.0 | $4,986.0 | -$350.0 |
| Science & Technology | $438.0 | $446.0 | $500.0 | $54.0 |
| Building and Facilities | $6,119.2 | $6,631.0 | $6,176.0 | -$455.0 |
| ***Hazardous Substance Superfund*** | ***$1,306.2*** | ***$934.0*** | ***$934.0*** | ***$0.0*** |
| Total Budget Authority | $12,781.4 | $13,347.0 | $12,596.0 | -$751.0 |
| Total Workyears | 5.9 | 12.2 | 12.2 | 0.0 |

### Program Project Description:

The federal government develops and maintains Continuity of Operations (COOP) plans and procedures that provide for the continued performance of its essential functions. The Homeland Security COOP program works with other government and non-government organizations to ensure that Mission Essential Functions (MEFs) and Primary Mission Essential Functions (PMEFs) continue to be performed during emergency situations. The Department of Homeland Security/Federal Emergency Management Agency's (FEMA) Federal Continuity Directive (FCD)-1 requires EPA to develop a continuity plan that ensures that its ability to accomplish its MEFs from an alternate site, during a national disaster, continues and that the Agency be able to do so with limited staffing and without access to resources available during normal activities.

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will undertake the following:

- Conduct selected annual reviews of regional COOP plans, PMEFs and MEFs, and make updates as needed;
- Monitor the continuity programs across the Agency, focusing on testing, training, and exercises as related to general COOP awareness and procedures; and
- Undergo a monthly evaluation of the headquarters COOP program, including Program Plans and Procedures, Risk Management, Budgeting, and Essential Functions. Further, FEMA performs an in-person biannual review of EPA's COOP program and provides the results to the Administrator and to the Executive Office of the President.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Information Exchange / Outreach

**Exchange Network**
Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $16,483.8 | $16,578.0 | $11,784.0 | -$4,794.0 |
| ***Hazardous Substance Superfund*** | ***$1,316.3*** | ***$1,319.0*** | ***$1,319.0*** | ***$0.0*** |
| Total Budget Authority | $17,800.1 | $17,897.0 | $13,103.0 | -$4,794.0 |
| Total Workyears | 28.7 | 30.2 | 30.2 | 0.0 |

**Program Project Description:**

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the Internet. Previous provision of new technology and data standards, open-source software, shared and portal services and reusable tools and applications have enabled EN partners to manage and analyze environmental data more effectively and efficiently, leading to improved decision-making.

The Central Data Exchange (CDX)[5] is the largest component of the EN program and serves as the point of entry on the EN for environmental data submissions to the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective enterprise architecture for the Agency by avoiding the creation of duplicative services. It also provides a set of value-added features and services that enable faster and more efficient transactions for internal and external clients of EPA, resulting in reduced burden.

CDX data exchange services are leveraged by EPA's programs, regions, states, tribes, territories and other federal agencies to meet their different business needs. With CDX, a stakeholder can submit data through one centralized point of access, exchange data with target systems using web services and utilize publishing services to share information collected by EPA and other stakeholders. By managing loosely connected and interoperable services, data exchange needs can be met using one or all of the available services such as:

- User registration;
- External user identity management;
- Electronic signature;
- Encryption and transmission;
- Virtual exchange services (VES); and
- Data quality assurance.

[5] For more information on the Central Data Exchange, please visit: http://www.epa.gov/cdx/.

Working in concert with CDX are EPA's System of Registries, which are centralized shared data services to improve data quality in EPA, state, and tribal program data, while promoting burden reduction for the reporting community. The following registries manage shared data centrally for reuse by the following EN partners:

- Facility Registry Service (FRS);
- Substance Registry Services (SRS);
- Tribes;
- Laws and Regulations Services (LRS);
- Terminology Services (TS);
- Reusable Component Services (RCS);
- Environmental Dataset Gateway (EDG);
- Registry of EPA Applications, Models, and Databases (READ); and
- Data Element Registry Services (DERS).

These shared data services catalog EPA and EN partner assets, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which when integrated into EPA and partner applications fosters data consistency and data quality as well as enabling data integration. By integrating these shared data services into their online reporting forms, EPA and its EN partners make it easier for the reporting community to discover the correct information to submit, reducing burden, which enables reuse by partner programs.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to support core functions for the Exchange Network IT systems. The potential for burden reduction and savings from IT improvements are significant. Schedules and plans for upgrades and modernization will be adjusted to align with resources. As part of the E-Enterprise business strategy, EPA will continue to carry out the baseline support for the following projects under the Exchange Network program: roll out of Federated Identity Management system for EPA and its partners; promote existing shared facility and substance identification services that improve quality and reduce burden on states and tribes; utilize current services for EPA's Laws and Regulations (LRS) registry, which will standardize identification of and associations between regulations, laws, and EPA's programs; and deploying established reusable electronic signature services to streamline Cross-Media Electronic Reporting Regulation (CROMERR) compliance. Advancements in data transport services, such as Virtual Exchange Services (VES), will continue to provide cloud-based solutions for EPA's state and tribal partners. Examples of important enhancements that could greatly streamline operations for states, tribes, industry and the Agency include a tool that helps industry identify potentially applicable regulations, and electronic filing capacity for imports and exports of environmentally sensitive products through the DHS/US Customs system, which reduces processing time from days or weeks to minutes or days.

In FY 2019, EPA will:

- Support existing outreach activities to increase awareness of CROMERR services and the savings to states and tribes from using these services; and
- Approve essential CROMERR applications from authorized programs that propose to use EPA's shared CROMERR services and assist co-regulators with integrating these services into their systems.

CROMERR activities are intended to assist states and tribes in the development activities associated with establishing a point of presence, exchanging data on the Network, and supporting local electronic reporting programs in a more cost effective way.

**Performance Measure Targets**:

Work under this program supports performance results in the Exchange Network program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Federal Information Security Management Act (FISMA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); Controlled Substances Act (CSA); The Privacy Act of 1974; Freedom of Information Act (FOIA).

# IT/ Data Management/ Security

**Information Security**
Program Area: IT / Data Management / Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $9,166.5 | $6,742.0 | $13,755.0 | $7,013.0 |
| ***Hazardous Substance Superfund*** | ***$654.9*** | ***$666.0*** | ***$5,186.0*** | ***$4,520.0*** |
| Total Budget Authority | $9,821.4 | $7,408.0 | $18,941.0 | $11,533.0 |
| Total Workyears | 21.6 | 14.3 | 12.8 | -1.5 |

## Program Project Description:

Information is a valuable national resource and a strategic asset to EPA. It enables the Agency to fulfill its mission to protect human health and the environment. The Agency's Information Security program is designed to protect the confidentiality, availability and integrity of EPA's information assets. The information protection strategy includes, but is not limited to:

- Policy, procedure and practice management;
- Information security awareness, training and education;
- Risk-based governance and oversight;
- Weakness remediation;
- Operational security management;
- Incident response and handling; and
- Federal Information Security Modernization Act (FISMA) compliance and reporting.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. Cybersecurity is a serious challenge to our nation's security and economic prosperity. EPA will maintain continuous monitoring of security controls in FY 2019 and address increasing security threats and risks. Effective information security requires vigilance and the ability to adapt to new challenges every day. EPA will continue to manage information security risk and build upon efforts to protect, defend and look to improve information security business processes to improve efficiency and effectiveness.

In FY 2019, EPA will continue to sustain some existing improvements. EPA expects to leverage the Continuous Diagnostics and Mitigation (CDM) program to close existing gaps by improving audit capabilities, ensuring accountability and adding protections directly associated with the information. The requested funding is essential to maintain the mandated CDM capabilities. To realize these improvements, the Agency will need to sustain the tools and processes implemented

to date. The security architecture, associated processes, and expert personnel comprise an ecosystem with cross dependencies, and the system is strongest when operating as a whole.

The CDM program, centrally managed by the Department of Homeland Security, provides tools that will give near real-time awareness of EPA's networks and environments. CDM consists of four implementation phases with an estimated cost of over $10 million in FY 2019 across all appropriations once all capabilities are in place. Data from the individual agency dashboards across the federal government will be aggregated into one federal-level dashboard maintained by the CDM program, which allows DHS to monitor and respond to federal cybersecurity threats and incidents much more quickly and efficiently. The Agency will continue to work with DHS to implement future phases based on capacity. Costs of operating and maintaining CDM capabilities are anticipated to increase significantly in FY 2019 as more capabilities come online. The Agency will prioritize security capabilities based on an evaluation of evolving threats.

The Information Security program also will continue to detect and remediate the effects of Advanced Persistent Threats to the Agency's information and information systems. The Agency will continue to focus on training and user-awareness to foster desired behavior, asset definition and management, compliance, incident management, knowledge and information management, risk management and technology management. These efforts will strengthen the Agency's ability to adequately protect information assets.

EPA will look to refine its Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting and reporting of suspicious activity. CSIRC's mission is to protect EPA's information assets and respond to security incidents – actual and potential. This includes detecting unauthorized attempts to access, destroy, or alter EPA's data and information resources. CSIRC will maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission. The incident response capability includes components such as detection and analysis; forensics; and containment and eradication activities.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$2,505.0) This change to fixed and other costs is an increase needed for mandatory cyber security requirements[6], including CDM. Funding will be used to close existing gaps by improving audit capabilities, ensuring accountability and adding protections directly associated with the information. This change also supports CDM phase three which will continue implementation in FY 2019.

- (+$2,015.0) This program change reflects an increase in funding needed to continue operations and maintenance previously provided by DHS for mandatory protections

[6] Including those found in Federal Information Security Modernization Act of 2014, and Federal Information Security Cybersecurity Act of 2015.

implemented in CDM phase one and two focusing on endpoint integrity, least privilege and infrastructure integrity.

**Statutory Authority:**

Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); the Privacy Act of 1974; Freedom of Information Act (FOIA).

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $82,580.0 | $83,179.0 | $69,264.0 | -$13,915.0 |
| Science & Technology | $3,342.0 | $3,068.0 | $2,725.0 | -$343.0 |
| ***Hazardous Substance Superfund*** | ***$14,691.5*** | ***$13,720.0*** | ***$13,720.0*** | ***$0.0*** |
| Total Budget Authority | $100,613.5 | $99,967.0 | $85,709.0 | -$14,258.0 |
| Total Workyears | 441.0 | 498.3 | 457.9 | -40.4 |

## Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) program is partially funded by the Superfund appropriation. The program supports human health and the environment by providing critical IT infrastructure and data management needed for:

1) Access to scientific, regulatory, policy and guidance information needed by the Agency, the regulated community and the public;
2) Analytical support for interpreting and understanding environmental information;
3) Exchange and storage of data, analysis and computation; and
4) Rapid, secure and efficient communication.

These areas are then organized into the following functional areas: information analysis and access; data management and collection; information technology and infrastructure; and geospatial information and analysis. This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states and other entities to interact with EPA electronically to get the information they need on demand, to understand what it means, and to submit and share environmental data with the least cost and burden. The program also provides support to other agency IT development projects and essential technology to agency staff, enabling them to conduct their work in support of Superfund programs effectively and efficiently. In the context of the Federal Information Technology Acquisition Reform Act (FITARA), EPA is bringing its IT acquisition, portfolio review, and governance processes together to adopt practices that improve delivery of capability to users, drive down lifecycle costs, and leverage shared services.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. EPA has progressively integrated new and transformative approaches to the way IT is managed across the Agency. The goal of EPA's IT/DM

services is to enhance the power of information by delivering on demand data to the right people at the right time. In FY 2019, the program will strive to meet EPA's IT/IM service need while continuously improving customer experiences to allow EPA, its partners and the public to acquire, generate, manage, use and share information as a critical resource to protect human health and the environment. To accomplish this, the program will focus available capacity on the following areas:

- Improve the way EPA supports and manages the lifecycle of information and information products;
- Modernize EPA's IT/IM infrastructure, applications and services;
- Empower a mobile workforce using innovative and agile solutions; and
- Empower state and tribal partnerships using innovative and agile solutions.

In FY 2019, EPA will continue to implement the E-Enterprise business strategy, a transformative 21st century strategy – jointly governed by states, tribes, and EPA - for modernizing government agencies' delivery of services to support the protection of human health and the environment. EPA is building on progress made using E-Enterprise for the Environment, a platform for transformative change that operationalizes cooperative federalism principles. EPA's E-Enterprise partnership with states and tribes modernizes the way we do the business of environmental protection. IT/DM activities will continue to facilitate shared services and electronic transactions with the regulated community and external partners who routinely conduct environmental business with EPA. The Agency will use E-Enterprise to deliver streamlined processes as well as accessible, reliable information and data that benefit co-regulators and the regulated community.

In FY 2019, EPA will continue to implement its IT acquisition review process as part of the implementation of federal Common Baseline Controls for FITARA. In addition, FITARA controls include an established solid communication and engagement strategy for the CIO with the Agency's programs and regional offices to ensure that their IT plans are well designed, directly drive agency strategic objectives, and follow best practices. Lastly, the controls ensure the CIO engages closely with key IT decision-makers across EPA and fosters plans to refresh IT skills within the Agency.

In FY 2019, the following IT/DM activities will continue to be provided for the Superfund program:

- **Data Management and Collection:** Data Management and Collection efforts include support for a variety of essential information management. For example, the National Records Management Program provides the framework within which program/regional records activities are conducted. These national activities include providing regulations, policies/procedures, coordination, and support to help fulfill EPA's statutory obligations to maintain records. Records management activities will be prioritized to align with available resources. Additionally, Discovery Services technology will continue to support the search/collection of agency information needed to help respond to requests for information from external stakeholders. Since October 2002, EPA has served as the managing partner of the interagency shared service e-Rulemaking Program; however, in FY 2019 EPA will work with the Office of Management and Budget and the National

Archives and Records Administration (NARA) towards transferring management services to the NARA/Office of the Federal Register.

- **Digital Services:** The FY 2019 budget includes funding to continue modest transformation of EPA's digital services to make them more cost-effective for the Agency to build and maintain. This includes some support to develop cloud computing approaches for the Agency.

- **Geospatial:** In addition to meeting ongoing program needs, Geospatial information and analysis play a critical role in the Agency's ability to respond rapidly and effectively in times of emergency. In FY 2019, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications and services, the Agency is able to integrate and interpret multiple data sets and information sources to support environmental decisions. During FY 2019, the Agency will continue to focus on Geoplatform data services, dashboards and story boards based on provided geographic information to support programmatic analysis and decision making. It also will better inform the public about EPA's use of grant funding to protect the environment and public health. In FY 2019, EPA also will provide support to the Geoplatform to publish internal and public mapping tools and make available a number of shareable maps, geodata services, and applications. EPA will continue to play a role in both the Federal Geographic Data Committee and the National Geospatial Platform, working with partner agencies to share geospatial technology capabilities across government.

- **Information Access and Analysis**: In FY 2019, EPA will focus on providing core support to agency infrastructure and utilizing tools that will harness the power of data across the Agency to drive better environmental decision making. The Agency will pause efforts to replace the data management functionality in the legacy Envirofacts data warehouse. EPA will provide partnership support to other agencies, states, tribes and academic institutions to propose innovative ways to use, analyze and visualize data.

  In addition, the program will provide support for maintenance of E-Enterprise capabilities and will provide analysis of environmental information to the public and EPA's staff. The program will continue to ensure compliance of EPA's public systems with Section 508 of the Rehabilitation Act of 1973.

- **Information Technology and Infrastructure**: In FY 2019, the Agency will continue to maintain essential information technology and infrastructure. The Agency will adjust the schedule for replacement or upgrades to align with resources. EPA will continue to maintain and provision: desktop computing equipment, network connectivity, e-mail and collaboration tools, application hosting, remote access, telephone services, web and network services, and other IT-related equipment. In FY 2019, the Agency will continue efforts to consolidate EPA's data centers and computer rooms and to optimize operations within EPA's remaining data centers.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-2.5 FTE) This program change reflects a reduction in support for enterprise IT systems/tools and emergency response.

**Statutory Authority:**

Modernizing Government Technology (MGT) Act; Federal Information Security Management Act (FISMA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Food Quality Protection Act (FQPA); Safe Drinking Water Act (SDWA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Paperwork Reduction Act (PRA); Freedom of Information Act (FOIA); Controlled Substances Act (CSA).

**Legal / Science / Regulatory / Economic Review**

**Legal Advice: Environmental Program**

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $52,889.7 | $49,657.0 | $42,292.0 | -$7,365.0 |
| ***Hazardous Substance Superfund*** | ***$691.2*** | ***$577.0*** | ***$577.0*** | ***$0.0*** |
| Total Budget Authority | $53,580.9 | $50,234.0 | $42,869.0 | -$7,365.0 |
| Total Workyears | 277.4 | 274.6 | 221.8 | -52.8 |

## Program Project Description:

This program provides legal representation, legal counseling and legal support for environmental activities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Funding supports legal advice needed in the Superfund program's extensive work with Potentially Responsible Parties (PRPs) and other entities and landowners. For example, this program provides legal analysis and advice to help inform EPA's decisions regarding the assessment of certain contaminants at a given Superfund site under federal law, and a party's potential liability under CERCLA.

This program supports EPA's Superfund work at thousands of sites spanning the wide array of Superfund legal issues regarding removal and remedial cleanups costing billions of dollars. This program is essential to providing the high quality legal work to ensure that EPA's decisions are defensible and upheld by the courts against judicial challenges.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the program will prioritize its legal support capabilities to focus support on high profile and critical CERCLA cases for the Superfund program. The program will work within available resources to support CERCLA activities, to include analyzing defensibility of Agency actions, drafting significant portions of agency actions, and participating in litigation in defense of agency actions.

This program is critical to the Superfund program in a multitude of ways. For example, in support of Goal 1 of EPA's Strategic Plan (Deliver real results to provide Americans with clean air, land and water) this program provides legal advice and counseling for final rules adding Superfund sites to the National Priorities List.

The following examples illustrate this program's important role in implementing the Agency's core priorities and mission.

- Participated in and provided legal counsel on the Administrator's Superfund Initiative Task Force including the development of the Task Force Report.
- Provided critical legal support and advice to the Superfund Remedial, Removal and Enforcement programs on complex, high visibility, expensive Superfund cleanups, such as Portland Harbor.

**Performance Measure Targets:**

Work under this program supports performance results in the Legal Advice: Environmental Program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continue Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Alternative Dispute Resolution**
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $1,142.0 | $1,015.0 | $0.0 | -$1,015.0 |
| ***Hazardous Substance Superfund*** | ***$591.3*** | ***$667.0*** | ***$0.0*** | ***-$667.0*** |
| Total Budget Authority | $1,733.3 | $1,682.0 | $0.0 | -$1,682.0 |
| Total Workyears | 7.5 | 6.7 | 0.0 | -6.7 |

**Program Project Description:**

EPA's General Counsel and Regional Counsel Offices provide environmental Alternative Dispute Resolution (ADR) services and workplace conflict prevention. EPA utilizes ADR as a method for preventing or resolving conflicts prior to engaging in formal litigation. ADR includes the provision of legal counsel, facilitation, mediation and consensus building advice and support. This program oversees a strategically-sourced contract for these services that provides mediation, facilitation, public involvement, training, and organizational development support to all headquarters and regional programs.

**FY 2019 Activities and Performance Plan:**

Resources and FTE are proposed for elimination for this program in FY 2019.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$667.0/ -1.4 FTE) This program change eliminates the centralization of the conflict prevention and ADR program. Programs across the Agency may pursue ADR support services and training individually.

**Statutory Authority:**

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 111, 117, 122; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Operations and Administration

**Acquisition Management**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $31,042.0 | $30,803.0 | $25,438.0 | -$5,365.0 |
| Leaking Underground Storage Tanks | $144.7 | $146.0 | $138.0 | -$8.0 |
| ***Hazardous Substance Superfund*** | ***$22,103.1*** | ***$21,296.0*** | ***$21,296.0*** | ***$0.0*** |
| Total Budget Authority | $53,289.8 | $52,245.0 | $46,872.0 | -$5,373.0 |
| Total Workyears | 277.0 | 304.5 | 259.5 | -45.0 |

## Program Project Description:

Superfund resources in the Acquisition Management program support the Agency's contracts activities for Superfund Emergency Response and Removal, Remedial, Emergency Preparedness, and Federal Facilities Response programs. These resources enable the Agency to assess and cleanup Superfund sites, as well as prepare and respond to natural disasters and terrorist incidents.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Federal Procurement Policy (OFPP). With its contract expiring in FY 2019, EPA will evaluate options for replacing EPA's Acquisition System (EAS) with a government-wide shared services contract writing system. EPA will target a strategic, government wide solution that leverages economies of scale using the shared knowledge and processes from other federal agencies. The Agency will focus on a solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes.

In FY 2019, EPA will continue to implement Best-in-Class (BIC) solutions to identify pre-vetted, government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[7] Through BIC solutions, EPA will leverage acquisition experts to optimize spending within the government-wide category management framework and increase the transactional data available for agency level analysis of buying behaviors. In FY 2019, EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals.

[7] For additional information, refer to: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*

The SSP also allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP can transform the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. The Agency has established a goal of obtaining at least five percent savings for all strategically sourced categories of goods and services. Through FY 2017, EPA has saved approximately $10 million from strategic sourcing initiatives focused on VoIP, laboratory supplies, print, cellular services, shipping, office supplies, equipment maintenance, and software. In FY 2019, EPA anticipates between $4 and $4.5 million in savings. In FY 2019, EPA will continue to focus on implementing the Financial Information Technology Acquisition Reform Act (FITARA) by:

- Avoiding vendor lock-in by letting contracts with multiple vendors or confining the scope of the contract to a limited task; and
- Developing acquisition vehicles that support the Agency in FITARA implementation.

In FY 2019, EPA also will continue supporting the Superfund Remedial Acquisition Framework (RAF), which modifies EPA's existing approach for acquiring services to support the Superfund Remedial program. In addition to providing a variety of acquisition tools for Superfund remedial services, RAF aligns with government-wide directives, maximizes competition to realize cost efficiency, strengthens the Agency's contract management processes, and helps to improve efficiency across the Superfund Remedial program.

**Performance Measure Targets:**

| **(PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | SA: 75%<br>CP: 65%<br>FAA: 80% | SA: 80%<br>CP: 70%<br>FAA: 85% |

| **(PR2) Acquisition costs avoided through use of strategic sourcing.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | $3,000,000 | $4,000,000 |

SA: Simplified Acquisitions; CP: Competitive Proposals; FAA: Funding and Administrative Actions

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (–15.0 FTE) This net program change reflects a focus on essential activities (e.g., processing contractual actions, implementing BIC solutions, maximizing EPA's Strategic Sourcing Program), and includes changes to fixed and other costs.

**Statutory Authority:**

Office of Federal Procurement Policy Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Central Planning, Budgeting, and Finance**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $73,003.2 | $71,493.0 | $68,635.0 | -$2,858.0 |
| Leaking Underground Storage Tanks | $373.2 | $404.0 | $420.0 | $16.0 |
| ***Hazardous Substance Superfund*** | ***$22,511.4*** | ***$21,345.0*** | ***$21,152.0*** | ***-$193.0*** |
| Total Budget Authority | $95,887.8 | $93,242.0 | $90,207.0 | -$3,035.0 |
| Total Workyears | 450.5 | 493.4 | 430.6 | -62.8 |

**Program Project Description:**

EPA's financial management community maintains a strong partnership with the Superfund program. EPA's Office of the Chief Financial Officer (OCFO) recognizes and supports this continuing partnership by providing a full array of financial management support services and systems necessary to pay Superfund bills and recoup cleanup and oversight costs for the Trust Fund. EPA's OCFO manages Superfund activities under the Central Planning, Budgeting and Finance program in support of integrated planning, budget formulation and execution, financial management, performance and accountability processes, financial cost recovery, and the systems to ensure effective stewardship of Superfund resources. This program supports the requirements of the Digital Accountability and Transparency (DATA) Act of 2014 and the Federal Information Technology Acquisition Reform Act (FITARA) of 2015.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. EPA will continue to provide direction and support for the Superfund program in financial management activities; implementing cost accounting requirements; financial payment and support services; and Superfund-specific fiscal and accounting services. EPA will maintain key planning, budgeting, and financial management activities. EPA will sustain basic operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System and related financial reporting systems.

EPA will continue to modernize and streamline business processes and operations to promote transparency and efficiency. The program will apply Lean principles and leverage input from customer-focused councils, advisory groups and technical workgroups to continue improving as a

high performance organization. EPA will standardize and streamline internal business processes and use additional federal and/or internal shared services when supported by business case analysis.

In FY 2019, the program will continue to focus on core responsibilities in the areas of strategic planning and budget preparation; financial reporting; transaction processing and Superfund Cost Recovery. The program will continue to implement FITARA requirements in accordance with EPA's Implementation Plan.[8] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that IT needs are properly planned and resourced in accordance with FITARA.

In FY 2019, the Agency will focus on the modernization of the Superfund Cost Recovery Package Imaging and On-Line System (SCORPIOS) to improve EPA's ability to recover costs from polluters. This necessary modernization will enhance EPA's ability to record and produce financial documentation for cost recovery packages and better align with EPA's technology stack and security standards and guidelines. In addition, investments will improve the ability of the Agency to manage and retrieve supporting cost documentation at the site/regional level. As a result, EPA will be able to support services necessary to: pay Superfund bills, recoup cleanup/ oversight costs for the Trust Fund, and provide effective stewardship of resources. This effort will reduce licensing costs and ongoing operations and maintenance costs.

EPA is dedicated to reducing fraud, waste, and abuse and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of 2002, EPA has reviewed, sampled, and monitored its Superfund contract payments to protect against erroneous payments. The Agency's payment streams are consistently well under the government-wide threshold of 1.5 percent and $10 million of estimated improper payments. EPA conducts risk assessments in its principal payment streams, including grants, contracts, commodities, payroll, travel, and purchase cards. When overpayments are identified, they are promptly recovered. EPA has expanded its risk assessments, performed statistical sampling, set appropriate reduction/recovery targets, and implemented corrective action plans. The Agency conducts these activities to reduce the potential for improper payments and ensure compliance with the Improper Payments Information Act, as amended by the Improper Payments Elimination and Recovery Act of 2010 (P.L. 111-204) and the Improper Payments Elimination and Recovery Act of 2012 (P.L. 112-248).

**Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$193.0/ -12.1 FTE) This net program change streamlines efforts in the areas of strategic planning, budget preparation, financial reporting and transaction processing, and includes changes to fixed and other costs.

[8] For more information: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute).

**Facilities Infrastructure and Operations**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $293,997.9 | $305,844.0 | $300,738.0 | -$5,106.0 |
| Science & Technology | $64,642.7 | $67,875.0 | $68,834.0 | $959.0 |
| Building and Facilities | $26,065.5 | $27,602.0 | $33,377.0 | $5,775.0 |
| Leaking Underground Storage Tanks | $502.2 | $793.0 | $773.0 | -$20.0 |
| Inland Oil Spill Programs | $376.2 | $580.0 | $665.0 | $85.0 |
| ***Hazardous Substance Superfund*** | ***$69,651.3*** | ***$75,985.0*** | ***$74,144.0*** | ***-$1,841.0*** |
| Total Budget Authority | $455,235.8 | $478,679.0 | $478,531.0 | -$148.0 |
| Total Workyears | 323.4 | 356.7 | 318.0 | -38.7 |

**Program Project Description:**

Superfund resources in the Facilities Infrastructure and Operations program fund the Agency's rent, utilities, and security. This program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, printing, mail, and transportation services. Funding is allocated for such services among the major appropriations for the Agency.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will continue to invest to reconfigure EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[9] the *Federal Assets Sale and Transfer Act of 2016*. Between FY 2015 and FY 2019 EPA will have released over 850,000 square feet of space nationwide, resulting in a cumulative annual rent avoidance of nearly $30 million across all appropriations. These savings help offset EPA's escalating rent and security costs. Currently planned consolidations through 2019 will allow EPA to release an estimated 306,000 square feet of space. For FY 2019, the Agency is requesting $46.53 million for rent, $2.22 million for utilities, and $6.93 million for security in the Superfund appropriation.

[9] For additional information, refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

At the requested resource levels, EPA will continue to manage lease agreements with GSA and other private landlords, maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, On-Scene Coordinators), and track capital equipment of $25 thousand or more.

**Performance Measure Targets:**

Work under this program supports performance results in the Facilities Infrastructure and Operations program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$954.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$5,008.0) This change to fixed and other costs rebalances funding proportions across major appropriation accounts.

- (-$7,803.0/ -2.3 FTE) This program change reflects a reduction in programs associated with environmental management systems, comprehensive facility energy audits, re-commissioning, and sustainable building design, and reflects the net change in agency activities in FY 2019 including:
  - support for employee wellness and worklife initiatives such as federal cost sharing for health wellness and CPR/AED training services, and libraries;
  - preventative maintenance of facilities, equipment, and vehicle fleet;
  - custodial services; and
  - EPA's mail delivery services.

**Statutory Authority:**

Federal Property and Administration Services Act; Public Building Act; Robert T. Stafford Disaster Relief and Emergency Assistance Act; Clean Water Act; Clean Air Act; Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Community Environmental Response Facilitation Act (CERFA); Energy Policy Act of 2005; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Financial Assistance Grants / IAG Management**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $24,444.8 | $25,416.0 | $18,986.0 | -$6,430.0 |
| ***Hazardous Substance Superfund*** | ***$2,997.4*** | ***$2,611.0*** | ***$2,611.0*** | ***$0.0*** |
| Total Budget Authority | $27,442.2 | $28,027.0 | $21,597.0 | -$6,430.0 |
| Total Workyears | 152.4 | 161.2 | 115.7 | -45.5 |

## Program Project Description:

Superfund resources in the Financial Assistance Grants and Interagency Agreement (IA) Management program support the management of grants and IAs, and suspension and debarment activities. Resources in this program ensure that EPA's management of grants and IAs meets the highest fiduciary standards, that grant and IA funding produces measurable results for environmental programs, and that the suspension and debarment program effectively protects the government's business interest. These objectives are critically important for the Superfund program, as a substantial portion of the program is implemented through IAs with the U.S. Army Corps of Engineers and the Coast Guard.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. In accordance with the overarching 2016-2020 EPA Grants Management Plan (GMP), and EPA's Strategic Plan, EPA will continue to implement activities to achieve efficiencies while enhancing quality and accountability. EPA will invest to modernize grant and IA IT systems by:

- Completing the migration away from aging Lotus Notes technology. For Grants, EPA is evaluating a federal Centers of Excellence solution for comprehensive and cost-effective grants management. EPA is targeting a platform that will streamline and standardize Agency processes, using the shared knowledge from other cabinet level and independent agencies. EPA is currently evaluating solutions based on their access to information, services, and reporting while enhancing the overall user experience. For IAs, EPA will integrate business solution using EPA's Interagency Document Online Tracking System (IDOTS).

- Eliminating reliance on paper for records and improving records management. For Grants, EPA will identify a solution that adopts electronic records management capabilities. For

IAs, EPA will integrate with the Agency's internal electronic records management tool (ECMS) using Documentum technology.

- Strengthening decision making with improved and standardized reporting capabilities. For Grants, EPA will centralize common reporting tools and other capabilities through a standardized platform. For IAs, EPA will consolidate technology and capabilities to leverage the Agency's existing financial reporting system.

In addition to IT-related investments, the GMP focuses on reducing the administrative burden on EPA and grants recipients, and on improving grants management procedures. Specifically, the Agency will continue to: 1) fully implement the streamlining reforms in OMB's Uniform Grants Guidance; 2) streamline EPA's grants management by ensuring policies conform to a new comprehensive framework; 3) review, refine, and streamline Lean grants management processes; and 4) Implement Lean recommendations for Intergovernmental Review (IR), which includes reducing the number of programs that require IR, automating the IR process as much as possible, and superseding/archiving EPA's IR policy. This will ensure that EPA is compliant with IR requirements without placing additional burden on EPA staff and applicants.

EPA is a recognized leader in suspension and debarment. The Agency will continue to make aggressive use of discretionary debarments and suspensions as well as statutory debarments under the Clean Air Act and Clean Water Act to protect the government's business interests. In FY 2019, EPA will focus suspension and debarment activity to the most egregious violations. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and non-procurement awards (for example: grants, cooperative agreements, loans, and loan guarantees). A number of recent federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs in order to protect taxpayers from bad actors.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-2.4 FTE) This program change reflects expected efficiencies in the processing of grant and IA awards, lower requested grant funding levels throughout the Agency and a review of unliquidated obligations. EPA will target funds to core grant and IA activities.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act, § 2455.

**Human Resources Management**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $50,608.8 | $43,930.0 | $40,860.0 | -$3,070.0 |
| ***Hazardous Substance Superfund*** | ***$5,380.1*** | ***$5,997.0*** | ***$5,497.0*** | ***-$500.0*** |
| Total Budget Authority | $55,988.9 | $49,927.0 | $46,357.0 | -$3,570.0 |
| Total Workyears | 249.5 | 247.9 | 223.8 | -24.1 |

**Program Project Description:**

Superfund resources for the Human Resources (HR) Management program support human capital activities throughout EPA. As requirements and initiatives change, EPA continually evaluates and improves the Superfund program's human resource functions in recruitment, hiring, and workforce development to help the Agency achieve its mission and maximize employee productivity and job satisfaction.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR enterprise risk management include: attracting and retaining a high-performing, diverse workforce; implementing training and development programs; delivering employee services; streamlining HR processes; and strengthening performance management, labor, and employee relations programs. EPA will continue to support efforts that increase the quality of core operations, improve productivity, and achieve cost savings in mission-support functions including human capital management.

In FY 2019, the Agency will continue to strengthen its performance management activities, including implementing the Agency's performance management plan. EPA will procure and deploy a learning management system through the Department of Interior's Interior Business Center or the Office of Personnel Management. The system will assist in developing and delivering management tools, targeting and providing timely and high-impact training that streamlines administrative functions, leverages EPA's First Line Supervisors Advisory Group, and assists with organizing mentoring on an as-needed basis.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$500.0) This program change reflects a focus on core human capital activities (e.g., deliver employee services; streamline HR processes; and strengthen performance management); modifies schedules for enhancements and/or maintenance of EPA's HR IT Systems and EPA's University portal that provides online training and professional development; and reduces centrally-provided, non-mandatory training.

**Statutory Authority:**

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

## Research: Sustainable Communities

**Research: Sustainable and Healthy Communities**
Program Area: Research: Sustainable Communities
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Science & Technology | $142,429.1 | $133,415.0 | $52,549.0 | -$80,866.0 |
| Leaking Underground Storage Tanks | $358.0 | $318.0 | $320.0 | $2.0 |
| Inland Oil Spill Programs | $653.4 | $659.0 | $516.0 | -$143.0 |
| ***Hazardous Substance Superfund*** | ***$12,717.6*** | ***$11,385.0*** | ***$10,885.0*** | ***-$500.0*** |
| Total Budget Authority | $156,158.1 | $145,777.0 | $64,270.0 | -$81,507.0 |
| Total Workyears | 459.7 | 476.3 | 294.1 | -182.2 |

**Program Project Description:**

This area of EPA's Sustainable and Healthy Communities (SHC) research program responds directly to the Superfund law requirements for a comprehensive and coordinated Federal "program of research, evaluation, testing, development, and demonstration of alternative or innovative treatment technologies…which may be utilized in response actions to achieve more permanent protection of human health and welfare and the environment."[10]

SHC's research under the Superfund appropriation provides federal, regional and community decision-makers with: engineering tools, methods and information to assess current conditions at Superfund sites; decision support tools to evaluate the implications of alternative remediation approaches and technologies, and reuse of sites; the latest science to support policy development and implementation; and, rapid access to technical support through EPA's Superfund Technical Support Centers.

**Recent accomplishments of the SHC program include:**

- **Superfund Engineering Technical Support Center (ETSC):** While the volume changes depending on site requirements, the ETSC typically addresses more than 300 requests each fiscal year. These requests serviced both National Priorities List Superfund and Resource Conservation and Recovery Act (RCRA) sites. The ETSC also prepared Engineering Impact Papers on six critical topics of broad application to site remediation across the U.S.[11]

- **Superfund Groundwater Technical Support Center (GWTSC):** The GWTSC consists of a broad base of scientists and engineers who provide help with subsurface

[10] 42 U.S.C. § 9660(b).
[11] For more information, see: https://www.epa.gov/superfund/superfund-technical-support-and-resource-centers.

contamination, contaminant fluxes from groundwater to other media, and ecosystem restoration issues. The center services National Priorities List and RCRA sites, typically responding to about 100 requests for assistance each fiscal year.[12]

- **Workshops on Emerging Remediation Technologies and Approaches:** The ETSC also is collaborating with state and other federal partners to hold workshops on emerging remediation technologies and approaches. For example, the ETSC worked with the State of California, the National Aeronautics and Space Administration, and the U.S. Geological Survey to provide a phytoremediation workshop in the third quarter of FY 2017 for federal, state and local stakeholders in Mountain View, CA.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. EPA research personnel and associated support staff will analyze existing research data on vapor intrusion, contaminated groundwater and sediments, and innovative technologies for site characterization and remediation and publish scientific journal articles to disseminate findings associated with the data.

**Performance Measure Targets:**

Work under this program supports performance results in the Sustainable and Healthy Communities Program under the S&T appropriation.

EPA is reconstituting a subcommittee under ORD's Board of Scientific Counselors (BOSC) for the SHC program to evaluate its performance and provide feedback to the Agency. The SHC program will meet regularly with both the BOSC and Science Advisory Board (SAB) over the next several years to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on its strategic research direction midway through the 4-year cycle of Strategic Research Action Plans (StRAPs).

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, U.S. Department of Agriculture and the White House's Office of Science and Technology Policy to assess research performance. EPA's Office of Research and Development (ORD's) state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies. Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials. EPA supports the interagency Science and Technology in America's Reinvestment, Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) efforts.[13]

[12] For more information, see: https://www.epa.gov/superfund/superfund-technical-support-and-resource-centers.
[13] STAR METRICS: https://www.starmetrics.nih.gov/.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$124.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$376.0) This program change streamlines the Agency's scientific and engineering expertise provided to address environmental problems via the three Technical Support Centers.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 102, 104(i), 105(a)(4), 311(c); Superfund Amendments Reauthorization Act of 1986, §§ 209(a), 403.

# Research: Chemical Safety and Sustainability

**Human Health Risk Assessment**
Program Area: Research: Chemical Safety and Sustainability
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Science & Technology | $40,506.5 | $37,554.0 | $22,267.0 | -$15,287.0 |
| ***Hazardous Substance Superfund*** | ***$3,020.5*** | ***$2,805.0*** | ***$5,021.0*** | ***$2,216.0*** |
| Total Budget Authority | $43,527.0 | $40,359.0 | $27,288.0 | -$13,071.0 |
| Total Workyears | 169.2 | 177.6 | 111.6 | -66.0 |

**Program Project Description:**

EPA's Human Health Risk Assessment (HHRA) research program supports the risk assessment needs of the Agency's Superfund programs and regional risk assessors by providing Provisional Peer-Reviewed Toxicity Values (PPRTVs), rapid risk assessments to respond to emergent scenarios, and technical guidance on their application. These assessment tools and activities support risk-based management decisions at contaminated Superfund and hazardous waste sites.

Scientists in the HHRA program synthesize the available scientific information on the potential health and environmental impacts of exposures to individual chemicals and chemical mixtures that are in the environment to assist in the Agency's chemical safety work. Results include:

- Improvements in environmental and human health in the vicinity of Superfund sites;
- Reduction or reversal of damages to natural resources;
- Reduction of harm in emergency situations;
- Improved economic conditions and quality of life in communities affected by hazardous waste sites;
- Improved environmental practices by industry;
- Advances in science and technology.

Priorities for PPRTV development are based on the needs of the Agency's Land and Emergency Management program and are evaluated annually. Applying new data streams, read-across approaches, and computational tools to enhance the supporting data/knowledge bases and efficiency of derivation for PPRTV values are active areas of research in the HHRA program. Lessons learned from this research will be leveraged and applied to other assessments in support of TSCA implementation.

Communities near Superfund sites or in emergency situations are faced with an urgent need for coordinated assistance to assess and address issues of environmental contamination. Additionally, these communities are now presented with new sensing or monitoring information that are difficult

to interpret and apply to decision making. The HHRA program develops approaches to respond to these emerging, often crisis-level, environmental contamination issues with scientific information that supports quick action, decisions and effective solutions. The HHRA program anticipates developing new assessment approaches by means of an expanded product line to enhance rapid response and screening capabilities and to augment toxicity value derivation procedures for health assessments.

**Recent accomplishments in the HHRA Research Program include:**

- Completed 12 Provisional Peer-reviewed Toxicity Value (PPRTV) documents based on needs and priorities of EPA's Superfund program.

- Fielded more than 40 requests for scientific support on human and ecological assessment via the Superfund Health Risk Technical Support Center (STSC) and Ecological Risk Assessment Support Center (ERASC).

**FY 2019 Activities and Performance Plan:**

Work in this program supports Goal 3/Objective 3.3 to Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. The HHRA program's work in FY 2019 will focus explicitly on efforts integral to achieving the Administrator's priorities and informing the Agency's implementation of key environmental regulations. Examples of this work include:

- **Portfolio of Chemical Evaluation Products:** Assessments that support policy and regulatory decisions for EPA's programs and regions, and state agencies, will be consolidated into a portfolio of C*hemical Evaluation* products that optimize the application of best available science and technology. These tailored 'fit-for-purpose' products will be shaped for use by partners, including EPA's program and regional offices, states, and other federal agencies.

- **Linking Databases and Management Tools:** HHRA will continue to collaborate with the Chemical Safety for Sustainability (CSS) research program to link the architecture of assessment databases and literature management tools, including *Health and Environmental Research Online* (HERO), with the RapidTox Dashboard being developed in CSS. This integration can be used to inform assessment development and fill gaps in assessments, especially for data poor chemicals.

- **Provisional Peer-reviewed Toxicity Values (PPRTV) Assessments:** Provide additional PPRTV assessments as prioritized by the Land and Emergency Management program to support risk-based decision making at Superfund sites and hazardous waste sites, as resources allow. This work improves EPA's ability to make decisions and address site related environmental health problems.

- **Rapid Risk Assessments:** Continue essential technical assistance across EPA to provide rapid risk assessments. This will combine problem formulation and state-of-the-art exposure information and tools with hazard information, chiefly through the continued

improvement of the derivation basis for PPRTVs for evaluating chemical specific exposures at Superfund sites, and by evaluating case-specific information related to emergent situations.

The Agency is currently reviewing the IRIS program to ensure it supports the Agency's highest priority public health decision-making, and its role in supporting the TSCA program.

**Performance Measure Targets:**

Work under this program supports performance results in the Human Health Risk Assessment program under the S&T appropriation.

EPA has established a standing subcommittee under EPA's Board of Scientific Counselors (BOSC) for the Chemical Safety for Sustainability and Human Health Risk Assessment National Research Programs that will be utilized to evaluate the HHRA program as part of its performance and provide feedback to the Agency. EPA will meet regularly with the BOSC to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on developing its strategic research direction and Strategic Research Action Plans for FY 2019-2022.

ORD's state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies. Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, the Association of State and Territorial Health Officials, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

EPA collaborates with several science agencies and the research community to assess our research performance such as the National Institutes of Health, the National Science Foundation, the Department of Energy, and the United States Department of Agriculture. The Agency also will work with the White House's Office of Science and Technology Policy. EPA supports the interagency Science and Technology in America's Reinvestment—Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) effort. This interagency effort is helping EPA to more effectively measure the impact of federal science investments have on society, the environment, and the economy.[14]

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$26.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$75.0/ -0.5 FTE) This program change decreases support for the Superfund Health Risk Technical Support Center and the Ecological Risk Assessment Support Center.

[14] STAR METRICS: https://www.starmetrics.nih.gov/.

- (+$2,317.0/ +15.2 FTE) This rebalances resources from the S&T appropriation to the Superfund appropriation for work related to IRIS Assessments.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Clean Air Act (CAA) §§ 103, 108, 109, 112; Clean Water Act (CWA) §§ 101(a)(6), 104, 105; Federal Insecticide Fungicide and Rodenticide Act (FIFRA) § 3(c)(2)(A); Food Quality Protection Act (FQPA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA), §§ 4(b)(1)(B), 4(b)(2)(B).

**Superfund Cleanup**

**Superfund: Emergency Response and Removal**
Program Area: Superfund Cleanup
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Hazardous Substance Superfund*** | ***$198,324.0*** | ***$180,075.0*** | ***$181,306.0*** | ***$1,231.0*** |
| Total Budget Authority | $198,324.0 | $180,075.0 | $181,306.0 | $1,231.0 |
| Total Workyears | 279.7 | 244.7 | 244.7 | 0.0 |

## Program Project Description:

The Emergency Response and Removal program (SF Removal) is the foundation of federal emergency response to releases of hazardous substances, pollutants or contaminants and is essential to managing the associated risks. In the case of a national emergency, EPA is charged with preventing limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. Typical situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan.[15] Further, this program is responsible for the Agency's only Primary Mission Essential Function.

Over the last 10 years (FY 2007 – FY 2016), EPA completed or oversaw over 3,655 Superfund removal actions across the country. SF Removal sites can be found in remote rural areas as well as large urban settings. Approximately 11 million people live within three miles of 221 SF Removal sites where EPA completed a removal action in FY 2016 – equal to about 3 percent of the total US population.[16] SF Removal cleanups vary in complexity and contain a wide variety of contaminants including mercury, lead, and asbestos.[17]

The SF Removal program provides technical assistance and outreach to industry, states, tribes, and local communities as part of the Agency's effort to ensure national safety and security for chemical and oil responses. EPA trains, equips, and deploys resources in order to manage, contain, and remove contaminants. These substances, until contained or removed, have the potential to significantly damage property, endanger public health and have critical environmental impact on communities.

[15] For additional information, refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.
[16] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes (1) site information as of the end of FY16 and (2) census data from the 2011-2015 American Community Survey.
[17] Data from US EPA SEMS.

Agency On-Scene Coordinators (OSCs) make up the core of the SF Removal program. These trained and equipped EPA personnel respond to, assess, mitigate, and cleanup up environmental releases regardless of the cause. States, local, and tribal communities rely upon the OSCs expertise and support to deal with environmental emergencies that are beyond their capabilities and resources. For example, in 2017, EPA deployed its National Incident Management Assistance Team (N-IMAT) to help with the long-term strategic planning and response efforts that occurred for Hurricanes Harvey, Irma, Maria, and the California Wildfires. For Hurricane Harvey, N-IMAT staff were responsible for working with the Texas Immediate Disaster Case Management program, developing health and safety plans for the cities of Houston and Corpus Christi. For Hurricanes Irma and Maria, N-IMAT staff helped with long-term planning and response efforts that are still ongoing in Puerto Rico and other parts of the Caribbean.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the SF Removal program will:

- Respond to, and provide technical assistance for, emergency responses, removal assessments, and limited time critical response actions (non-emergency responses).

- Conduct and participate in selected multi-media training and exercises for emergency responders. These events ensure readiness by focusing on necessary coordination and consistency across the Agency, enhance specialized technical skills and expertise, and strengthen partnerships with state, local, tribal, and other federal responders.

- Support the Environmental Response Team (ERT), which provides nationwide assistance and consultation for emergency response actions, including unusual or complex incidents. In such cases, the ERT supplies the OSC, or lead responder, with special equipment and technical or logistical assistance.

- Continue to deploy its National Incident Management Assistance Team (N-IMAT) to set up organizational systems that help with the long-term strategic planning and response efforts.

**Performance Measure Targets:**

| (137) Number of Superfund removals completed. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 175 | 175 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,231.0) This program change reflects an increase in funding to focus on sites which pose an immediate threat to human health and the environment, and includes changes to fixed and other costs.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Sections 104, 105, 106; Clean Water Act (CWA); and Oil Pollution Act (OPA).

**Superfund: EPA Emergency Preparedness**
Program Area: Superfund Cleanup
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Hazardous Substance Superfund*** | ***$7,174.6*** | ***$7,584.0*** | ***$7,584.0*** | ***$0.0*** |
| Total Budget Authority | $7,174.6 | $7,584.0 | $7,584.0 | $0.0 |
| Total Workyears | 34.1 | 37.4 | 37.4 | 0.0 |

## Program Project Description:

The Superfund Emergency Preparedness program provides for EPA's engagement on the National Response Team (NRT) and Regional Response Teams (RRT) where it ensures federal agencies are prepared to respond to national incidents, threats, and major environmental emergencies. EPA implements the Emergency Preparedness program in coordination with the Department of Homeland Security and other federal agencies in order to deliver federal hazard assistance to state, local, and tribal governments.

The Agency carries out its responsibility under multiple statutory authorities as well as the National Response Framework (NRF), which provides the comprehensive federal structure for managing national emergencies. EPA is the designated lead for the NRF's Oil and Hazardous Materials Response Annex - Emergency Support Function #10 which covers responsibilities for responding to releases of hazardous materials, oil, and other contaminants that are a threat to human health and the environment. As such, the Agency participates and leads applicable interagency committees and workgroups to develop national planning and implementation policies at the operational level.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. EPA continuously works to improve its management of emergency response assets to be better prepared to handle large unprecedented incidents in order to increase cost effectiveness and avoid costly cleanup actions. The Superfund Emergency Preparedness program participates in national and local exercises and drills, coordinates with stakeholders to develop Area and Regional Contingency Plans (ACPs), and provides technical assistance to industry, states, tribes, and local communities. Specific activities include:

- Chair the NRT[18] and co-chair the 13 RRTs. The NRT and RRTs are the only active environmentally-focused interagency executive committees addressing oil and hazardous

[18] For additional information, refer to: https://www.nrt.org/.

substance emergencies. They serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams.

- Participate in the development of limited, scenario-specific exercises and regional drills designed to assess national emergency response management capabilities. These activities will involve the RRTs, NRT, and/or principal level participants.

- Continue to implement the National Incident Management System (NIMS)[19] which provides the approach to manage incidents and works hand in hand with the NRF.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Robert T. Stafford Disaster Relief and Emergency Assistance Act.

[19] For additional information, refer to: http://www.fema.gov/national-incident-management-system.

**Superfund: Federal Facilities**
Program Area: Superfund Cleanup
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Hazardous Substance Superfund*** | ***$22,434.2*** | ***$20,982.0*** | ***$20,982.0*** | ***$0.0*** |
| Total Budget Authority | $22,434.2 | $20,982.0 | $20,982.0 | $0.0 |
| Total Workyears | 106.2 | 111.7 | 111.7 | 0.0 |

## Program Project Description:

The Superfund Federal Facilities program oversees and provides technical assistance for the protective and efficient cleanup and reuse of Federal Facility National Priorities List (NPL) sites,[20] as mandated by law. Program responsibilities include: 1) inventorying and assessing potentially contaminated sites; 2) implementing protective remedies; 3) facilitating early transfer of property; and 4) ensuring ongoing protectiveness of completed cleanups. The program collaborates with other federal agencies and states to target high priority sites, consider best practices, develop solutions to problems caused by emerging contaminants, implement strategies to reach cleanup completion, and bring contaminated land into beneficial reuse. Sixty-four of the 174 Federal Facility NPL sites, have achieved Site-Wide Ready for Anticipated Use and over 375,000 acres have been returned to beneficial use.

The work done by this program helps reduce public exposure to dangerous hazardous materials. The Federal Facility NPL sites are among the largest in the Superfund program and can encompass specialized environmental contaminants such as munitions and radiological waste, and emerging contaminants such as per- and polyfluoralkyl substances (PFAS).[21] The average size of a Federal Facility NPL site is over 26,000 acres while the average size for private sites is over 5,000 acres. The larger size of these facilities in combination with specialized contaminants can make the investigation and cleanup work more challenging for the program. For example, Fort Wainwright in AK is the largest Federal Facility NPL Site and the largest site in the Superfund program at 918,000 acres.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the program will prioritize the highest risk sites and oversee cleanups at Federal Facility NPL sites, with issues ranging from hazardous substances in groundwater, munitions and explosives of concern, emerging

[20] As of August 3, 2017, there are 174 Federal Facility sites on the NPL. Please see: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.
[21] For additional information please visit, https://www.epa.gov/fedfac.

contaminants, and contamination from legacy nuclear weapons development and energy research. In FY 2019, the Federal Facilities program will focus on activities that bring human exposure and groundwater migration under control.

In FY 2019, the program will update the Federal Agency Hazardous Waste Compliance Docket (Docket). The Docket is updated semiannually and has over 2,300 facilities listed. Required by Section 120(d) of CERCLA, EPA manages the Docket, which contains information reported by federal facilities that manage hazardous waste or from which hazardous substances, pollutants, or contaminants have been or may be released. The Docket 1) identifies all federal facilities that must be evaluated through the site assessment process; 2) determines whether they pose a risk to human health and the environment sufficient to warrant inclusion on the NPL; and 3) provides a mechanism to make the information available to the public.

The program will collaborate with other federal agencies, state, local, and tribal partners to encourage restoration of sites. EPA will work to simplify and expedite the review process to transfer federal property for beneficial use or future economic development.

EPA will continue to strengthen oversight and assistance with Department of Energy (DOE) sites. DOE estimates that the 16 remaining legacy Cold War sites will take decades to complete, due to groundwater, soil, and waste processing. Similarly, EPA will continue to strengthen oversight and technical assistance at Department of Defense's (DoD) military munitions response sites and support DoD's development of new technologies to streamline cleanups. DoD's inventory includes over 300 operable units containing munitions and explosives of concern that still require investigation. These sites contain chemical and explosive compounds which require special handling, storage, and disposal practices, as well as cleanup challenges.

EPA no longer receives resources from the DoD to support accelerated cleanup and reuse at Base Realignment and Closure (BRAC) sites. EPA will continue oversight work at BRAC sites that are on the NPL with appropriated resources, as needed.

**Performance Measure Targets:**

| (FF1) Percentage of Superfund federal facility sites construction complete. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 83 | 85 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), § 120.

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Hazardous Substance Superfund*** | ***$544,822.9*** | ***$505,042.0*** | ***$508,495.0*** | ***$3,453.0*** |
| Total Budget Authority | $544,822.9 | $505,042.0 | $508,495.0 | $3,453.0 |
| Total Workyears | 939.4 | 868.8 | 868.8 | 0.0 |

## Program Project Description:

The Superfund Remedial program addresses many of the worst contaminated areas in the United States by conducting investigations and then implementing long term cleanup remedies, as well as overseeing response work conducted by potentially responsible parties (PRPs) at National Priorities List (NPL) and Superfund Alternative Approach (SAA) sites. Response actions can take from a few months for relatively straight-forward soil excavation or capping remedies to several decades for complex, large area-wide groundwater, sediment, or mining site remedies.

Approximately 53 million, or 16 percent, of all Americans, live within three miles of Superfund site. A study conducted by researchers at Columbia University, Massachusetts Institute of Technology, and University of California Berkeley found that Superfund cleanups reduce the incidence of congenital anomalies by roughly 20-25 percent among infants born to mothers living within 2,000 meters of a site.[22] Birth defects avoided means improved human health for an entire future generation. Ecosystems also are improved by addressing pollutants from contaminated sites and protecting drinking water supplies and/or fishery habitats.

By addressing the human health and environmental risks posed by releases at NPL and SAA sites, the Superfund Remedial program strengthens the economy and spurs economic growth by returning Superfund sites to productive use. As of FY 2017, EPA data shows that at 487 Superfund sites in reuse, approximately 6,622 businesses are generating $43.6 billion in sales and employ more than 156,352 people who earn a combined income of $11.2 billion.[23] While conducting cleanup at NPL and SAA sites, Superfund remedial construction projects can have a direct impact on enhancing our national infrastructure while addressing harmful exposures. Cleanup work under the Superfund Remedial program also improves property values. A study conducted by researchers at Duke University and University of Pittsburgh found that residential property values within three

[22] Currie, Janet, Michael Greenstone, and Enrico Moretti. 2011. "Superfund Cleanups and Infant Health". *American Economic Review*, 101(3): 435-441.
[23] For more information on Redevelopment Economics and in depth case studies see www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.

miles of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and deleted from the NPL.[24]

In FY 2017, the Administrator established the Superfund Task Force which identified forty-two recommendations under five overarching goals:

- Expediting Cleanup and Remediation
- Re-Invigorating Responsible Party Cleanup and Reuse
- Encouraging Private Investment
- Promoting Redevelopment and Community Revitalization
- Engaging Partners and Stakeholders

Work to prioritize and reinvigorate the program by the task force has been initiated and will be ongoing into the future. A first step in this effort was the recent release of a list of sites targeted for immediate, intense action. The list will be updated continuously as identified issues are resolved.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will prioritize resources to execute its federal, non-delegable responsibility to clean up sites and protect human health and the environment. The Superfund Remedial program endeavors to maximize the use of special account resources collected from settlement agreements with PRPs for response actions at specific sites. As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and annually appropriated resources are critical to clean up Superfund sites. More than half of non-federal sites on the final NPL do not have an associated special account and must rely on annually appropriated funds.

In FY 2019, EPA will continue to implement recommendations from the Superfund Task Force to expedite cleanup and remediation while continuing to encourage private investment, facilitate reuse, promote redevelopment of Superfund sites, and build and strengthen partnerships. EPA will prioritize ongoing fund-lead investigation, remedial design and construction projects to bring human exposure and groundwater migration under control. EPA will continue its statutory responsibility to provide oversight of PRP-lead activities at Superfund sites, consistent with legal settlement documents, and five-year review activities required by law.

**Performance Measure Targets:**

| (141) Number of Superfund sites with remedy construction completed. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 11 | 11 |

[24] Gamper-Rabindran, Shanti and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," Journal of Environmental Economics and Management 65(3): 345-360.

| (151) Number of Superfund sites with human exposures brought under control. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 8 | 8 |

| (152) Number of Superfund sites with contaminated groundwater migration brought under control. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 11 | 11 |

| (S10) Number of Superfund sites made ready for anticipated use site-wide. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 51 | 51 |

| (115) Number of Superfund remedial site assessments completed. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 650 | 580 |

| (170) Number of remedial action projects completed at Superfund sites. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 95 | 95 |

## FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+$3,453.0) This program change reflects an increase to prioritize resources on NPL sites that present the highest risk to human health and the environment, and includes changes to fixed and other costs.

## Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

# Superfund Special Accounts

# SUPERFUND SPECIAL ACCOUNTS

## Background

EPA has the authority to collect funds from parties to support Superfund investigations and cleanups. Section 122(b)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorizes EPA to retain and use funds received pursuant to a settlement agreement with a party to carry out the purpose of that agreement. Funds are deposited in Superfund special accounts for cleanup at the sites designated in individually negotiated settlement agreements. Through the use of special accounts, EPA ensures responsible parties pay for cleanup so that annually appropriated resources from the Superfund Trust Fund are generally conserved for sites where no viable or liable potentially responsible parties (PRPs) can be identified. Each account is set up separately and distinctly and may only be used for the sites and uses outlined in the settlement(s) with the party.

Special accounts are sub-accounts in the Superfund Trust Fund. Pursuant to the specific agreements, which typically take the form of an Administrative Order on Consent or Consent Decree, EPA uses special account funds to finance site-specific CERCLA response actions at the site for which the account was established. Of the 1,342 Superfund sites listed as final on the National Priorities List, more than half do not have special account funds available for use (as of October 1, 2017). As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and annually appropriated resources are critical to the Superfund program to clean up Superfund sites.

Special account funds are used to conduct many different site-specific CERCLA response actions, including, but not limited to, investigations to determine the nature and extent of contamination and the appropriate remedy, design, construction and implementation of the remedy, enforcement activities, and post-construction activities. EPA also may provide special account funds as an incentive to another PRP(s) who agrees to perform additional work beyond the PRP's allocated share at the site, which EPA might otherwise have to conduct. Because response actions may take many years, the full use of special account funds also may take many years. Pursuant to the settlement agreement and in accordance with EPA policy, once site-specific work is complete and site risks are addressed, special account funds may be used to reimburse EPA for site-specific costs incurred using appropriated resources (i.e., reclassification), allowing the latter resources to be allocated to other sites. Any remaining special account funds are transferred to the Superfund Trust Fund, where they are available for future appropriation by Congress to further support response work.

EPA, through the Superfund Task Force, is working to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial use as expeditiously as possible. Maximizing the use of special accounts to facilitate site cleanup and/or redevelopment is one of the Task Force's recommendations we continue to work on.

**FY 2017 Special Account Activity**

Since the inception of special accounts through the end of FY 2017, EPA has collected approximately $6.8 billion from parties and earned more than $443 million in interest.[25] Approximately 56 percent of the funds have been disbursed or obligated for response actions at sites and plans have been developed to guide the future use of the remaining 44 percent of available special account funds. In addition, at sites with no additional work planned or costs to be incurred by EPA, EPA has transferred approximately $31.4 million to the Superfund Trust Fund. As of the end of FY 2017, approximately $3.5 billion has been disbursed for site response actions and $548.8 million has been obligated but not yet disbursed.

The Agency continues to receive site-specific settlement funds that are placed in special accounts each year, so progress on actual obligation and disbursement of funds may not be apparent upon review solely of the cumulative available balance. In FY 2017, EPA deposited more than $289 million into special accounts and disbursed and obligated over $357 million from special accounts (including reclassifications). At the end of FY 2017, the cumulative amount available in special accounts was $3.21 billion.

Special accounts vary in size. A limited set represent the majority of the funds available. At the end of FY 2017, 4 percent of open accounts had greater than $10 million available and hold more than 71 percent of all available funds in open accounts. There are many accounts with lower available balances. 72 percent of all open accounts have up to $1 million available and represent only 6 percent of available funds in all open accounts.

The balance of more than $3.21 billion is not equivalent to an annual appropriation. The funds collected under settlements are intended to finance future response work at particular sites for the length of the project. EPA is carefully managing those funds that remain available for site response work and develops plans to utilize the available balance. EPA will continue to plan the use of funds received to conduct site-specific response activities, or reclassify and/or transfer excess funds to the Superfund Trust Fund to make annually appropriated funds available for use at other Superfund sites.

For some Superfund sites, although funds are readily available in a special account, remedial action may take time to initiate and complete. This is due to site-specific conditions such as the specific requirements for special account use set forth in the settlement agreement, the stage of site cleanup, the viability of other responsible parties to conduct site cleanup, and the nature of the site contamination. EPA has plans to spend approximately $1.3 billion of currently available special account funds over the next 5 years, but funds also are planned much further into the future to continue activities such as conducting five year reviews or remedy optimization where waste has been left in place.

In FY 2017, EPA disbursed and obligated more than $340 million from special accounts (excluding reclassifications) for response work at more than 700 Superfund sites. Some examples include more than $125 million to support work at the New Bedford site in Massachusetts, more than $18 million for the Commencement Bay, Near Shore/Tide Flats site in Washington, and more

[25] The $443 million in interest earned represents the amount of interest that has been allocated to individual special accounts.

than $17 million for the U.S. Smelter and Lead Refinery, Inc. (East Chicago) site in Indiana. Without special account funds being available, appropriated funds would have been necessary for these response actions to be funded. In other words, EPA was able to fund more than $340 million in response work at sites in addition to the work funded through appropriated funds obligated or disbursed in FY 2017.

The summary charts below provide additional information on the status of special accounts. Exhibit 1 illustrates the cumulative status of open and closed accounts, FY 2017 program activity, and planned multi-year uses of the available balance. Exhibit 2 provides the prior year (FY 2017), current year (FY 2018), and estimated future budget year (FY 2019) activity for special accounts. Exhibit 3 provides prior year data (FY 2017) by EPA Regional Offices to exhibit the geographic use of the funds.

## Exhibit 1: Summary of FY 2017 Special Account Transactions and Cumulative Multi-Year Plans for Using Available Special Account Funds

| **Account Status**[1] | **Number of Accounts** |
|---|---|
| Cumulative Open | 1,037 |
| Cumulative Closed | 350 |
| **FY 2017 Special Account Activity** | **$ in Thousands** |
| Beginning Available Balance | $3,283,116.4 |
| FY 2017 Activities | |
| + Receipts | $289,443.0 |
| - Transfers to Superfund Trust Fund (Receipt Adjustment) | ($2,293.7) |
| + Net Interest Earned | ($2,282.8) |
| - Net Change in Unliquidated Obligations | ($84,170.6) |
| - Disbursements - For EPA Incurred Costs | ($255,166.0) |
| - Disbursements - For Work Party Reimbursements under Final Settlements | ($979.9) |
| - Reclassifications | ($16,810.7) |
| End of Fiscal Year (EOFY) Available Balance[2] | $3,210,855.5 |
| **Multi-Year Plans for EOFY 2017 Available Balance**[3] | **$ in Thousands** |
| 2017 EOFY Available Balance | $3,210,855.5 |
| - Estimates for Future EPA Site Activities based on Current Site Plans[4] | $3,037,075.2 |
| - Estimates for Potential Disbursement to Work Parties Identified in Final Settlements[5] | $53,987.0 |
| - Estimates for Reclassifications for FYs 2018-2020[6] | $86,393.7 |
| - Estimates for Transfers to Trust Fund for FYs 2018-2020[6] | $31,663.8 |
| - Available Balance to be Planned for Site-Specific Response[7] | $1,735.8 |

[1] FY 2017 data is as of 10/01/2017. The Beginning Available Balance is as of 10/01/2016.

[2] Numbers may not add due to rounding.

[3]Planning data were recorded in the Superfund Enterprise Management System (SEMS) as of 10/30/2017 in reference to special account available balances as of 10/01/2017.

[4] "Estimates for EPA Future Site Activities" includes all response actions that EPA may conduct or oversee in the future, such as removal, remedial, enforcement, post-construction activities as well as allocation of funds to facilitate a settlement to encourage PRPs to perform the cleanup. Planning data are multi-year and cannot be used for annual comparisons.

[5] "Estimates for Potential Disbursements to Work Parties Identified in Finalized Settlements" includes those funds that have already been designated in a settlement document, such as a Consent Decree or Administrative Order on Consent, to be available to a PRP for reimbursements but that have not yet been obligated.

[6] "Reclassifications" and "Transfers to the Trust Fund" are estimated for three FYs only. These amounts are only estimates and may change as EPA determines what funds are needed to complete site-specific response activities.

[7] These include resources received by EPA at the end of the fiscal year and will be assigned for site-specific response activities.

## Exhibit 2: Actual and Estimated Special Account Transactions FY 2017 – FY 2019

| | FY 2017 | FY 2018 estimate | FY 2019 estimate |
|---|---|---|---|
| | $ in Thousands | | |
| Beginning Available Balance | $3,283,116.4 | $3,210,855.5 | $3,181,855.5 |
| Receipts[1] | $289,443.0 | $250,000.0 | $250,000.0 |
| Transfers to Trust Fund (Receipt Adjustment)[2] | ($2,293.7) | ($1,520.0) | ($1,520.0) |
| Net Interest Earned[3] | ($2,282.8) | $23,000.0 | $24,000.0 |
| Net Obligations[2,4] | ($340,316.6) | ($302,100.0) | ($302,100.0) |
| Reclassifications[2] | ($16,810.7) | ($26,380.0) | ($26,380.0) |
| End of Year Available Balance[5] | $3,210,855.5 | $3,181,855.5 | $3,165,855.5 |

[1]The estimates for Receipts are in line with more typical years.

[2]The estimates for Transfers to Trust Fund, Net Obligations, and Reclassifications are based on a 3-year historical average.

[3]Net interest earned projections for FY 2018 and FY 2019 are estimated utilizing economic assumptions for the FY 2019 President's Budget. At the end of FY 2015, the Agency worked with the Department of Treasury to create a new point account for Superfund special accounts in the Superfund Trust Fund. In FY 2017, $38.5 million in interest was earned on the special account funds invested in the Superfund Trust Fund. However, there has been a time lag for those funds to be captured in the Agency's system and made available for use.

[4]Net Obligations reflect special account funds no longer available for obligation, excluding reclassifications and receipts transferred to the Trust Fund.

[5]Numbers may not add due to rounding.

## Exhibit 3: FY 2017 Special Account Transactions by EPA Regional Offices

*$ in Thousands*

| | Beginning Available Balance | Receipts | Transfers to Trust Fund (Receipt Adjustment) | Net Interest Earned | Net Obligations | Reclassifications | End of Year Available Balance[2] |
|---|---|---|---|---|---|---|---|
| Region 1 | $337,247.2 | $21,535.3 | $0.0 | $0.0 | ($133,921.0) | ($6,803.2) | $218,058.4 |
| Region 2 | $481,554.8 | $76,940.1 | $0.0 | $0.0 | ($40,018.5) | ($1,960.6) | $516,516.0 |
| Region 3 | $114,392.6 | $42,787.7 | ($348.1) | ($0.4) | ($8,776.4) | ($3,187.0) | $144,868.5 |
| Region 4 | $68,240.5 | $12,449.8 | ($1,405.2) | $0.0 | ($3,044.8) | $0.0 | $76,240.6 |
| Region 5 | $391,565.3 | $28,974.9 | ($539.8) | ($2,283.6) | ($34,740.0) | ($1,580.3) | $381,396.7 |
| Region 6 | $79,883.7 | $13,666.0 | $0.0 | $0.0 | ($4,576.7) | $0.0 | $88,972.5 |
| Region 7 | $148,140.6 | $7,821.4 | $0.0 | $1.3 | $1,473.8 | ($308.8) | $157,127.8 |
| Region 8 | $215,310.5 | $20,773.1 | ($0.6) | $0.0 | ($23,835.3) | ($2,791.3) | $209,456.7 |
| Region 9 | $1,281,313.5 | $26,739.1 | $0.0 | ($0.2) | ($24,677.0) | ($179.5) | $1,283,195.4 |
| Region 10 | $165,467.9 | $37,755.6 | $0.0 | $0.0 | ($68,200.7) | $0.0 | $135,022.9 |
| Total | $3,283,116.4 | $289,443.0 | ($2,293.7) | ($2,282.8) | ($340,316.6) | ($16,810.7) | $3,210,855.5 |

[1] FY 2017 data is as of 10/01/2017. The Beginning Available Balance is as of 10/01/2016.

[2] Numbers may not add due to rounding.

## Table of Contents – Leaking Underground Storage Tanks

**APPROPRIATION: Leaking Underground Storage Tanks**

## Resource Summary Table
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Leaking Underground Storage Tanks** | | | | |
| Budget Authority | $92,143.4 | $91,317.0 | $47,532.0 | -$43,785.0 |
| Total Workyears | 48.5 | 54.1 | 40.7 | -13.4 |

## Bill Language: Leaking Underground Storage Tank Trust Fund Program

*For necessary expenses to carry out leaking underground storage tank cleanup activities authorized by subtitle I of the Solid Waste Disposal Act, $47,532,000, to remain available until expended, of which $47,532,000 shall be for carrying out leaking underground storage tank cleanup activities authorized by section 9003(h) of the Solid Waste Disposal Act: Provided, That the Administrator is authorized to use appropriations made available under this heading to implement section 9013 of the Solid Waste Disposal Act to provide financial assistance to federally recognized Indian tribes for the development and implementation of programs to manage underground storage tanks.*

## Program Projects in LUST
(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Enforcement | | | | |
| Civil Enforcement | $584.7 | $616.0 | $589.0 | -$27.0 |
| Operations and Administration | | | | |
| Central Planning, Budgeting, and Finance | $373.2 | $404.0 | $420.0 | $16.0 |
| Facilities Infrastructure and Operations | $502.2 | $793.0 | $773.0 | -$20.0 |
| Acquisition Management | $144.7 | $146.0 | $138.0 | -$8.0 |
| Subtotal, Operations and Administration | $1,020.1 | $1,343.0 | $1,331.0 | -$12.0 |
| Underground Storage Tanks (LUST / UST) | | | | |
| LUST / UST | $9,554.5 | $9,177.0 | $6,452.0 | -$2,725.0 |
| LUST Cooperative Agreements | $55,320.2 | $54,666.0 | $38,840.0 | -$15,826.0 |
| LUST Prevention | $25,305.9 | $25,197.0 | $0.0 | -$25,197.0 |
| Subtotal, Underground Storage Tanks (LUST / UST) | $90,180.6 | $89,040.0 | $45,292.0 | -$43,748.0 |

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Research: Sustainable Communities | | | | |
| Research: Sustainable and Healthy Communities | $358.0 | $318.0 | $320.0 | $2.0 |
| **TOTAL LUST** | **$92,143.4** | **$91,317.0** | **$47,532.0** | **-$43,785.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Enforcement

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $172,309.6 | $170,849.0 | $140,677.0 | -$30,172.0 |
| ***Leaking Underground Storage Tanks*** | ***$584.7*** | ***$616.0*** | ***$589.0*** | ***-$27.0*** |
| Inland Oil Spill Programs | $2,342.8 | $2,397.0 | $2,219.0 | -$178.0 |
| Total Budget Authority | $175,237.1 | $173,862.0 | $143,485.0 | -$30,377.0 |
| Total Workyears | 1,061.0 | 1,080.4 | 857.1 | -223.3 |

## Program Project Description:

The Civil Enforcement program's goal is to ensure compliance with the nation's environmental laws to protect human health and the environment. The program collaborates with the United States Department of Justice, states, local agencies, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

To protect our nation's groundwater and drinking water from petroleum releases from Underground Storage Tanks (UST), the Civil Enforcement program provides guidance, technical assistance, and training to promote and enforce cleanups at sites with UST systems.[1] The Enforcement and Compliance Assurance program uses its Leaking Underground Storage Tanks (LUST) resources to oversee cleanups by responsible parties.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will work with states and tribes on a case-by-case basis to prioritize LUST enforcement goals for cleanup. The Agency will continue to provide guidance, technical assistance, oversight, and training to enforce cleanups at LUST sites by responsible parties.

## Performance Measure Targets:

Work under this program supports performance results in the Civil Enforcement program under the EPA appropriation.

[1] For more information, refer to: www.epa.gov/swerust1/cat/index.htm.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$128.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$155.0/ -0.6 FTE) EPA will target funds to highest priority sites.

**Statutory Authority:**

Pollution Prevention Act; Community Environmental Response Facilitation Act; National Environmental Policy Act; Atomic Energy Act; Uranium Mill Tailings Radiation Control Act; Resource Conservation and Recovery Act.

# Operations and Administration

**Acquisition Management**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $31,042.0 | $30,803.0 | $25,438.0 | -$5,365.0 |
| ***Leaking Underground Storage Tanks*** | ***$144.7*** | ***$146.0*** | ***$138.0*** | ***-$8.0*** |
| Hazardous Substance Superfund | $22,103.1 | $21,296.0 | $21,296.0 | $0.0 |
| Total Budget Authority | $53,289.8 | $52,245.0 | $46,872.0 | -$5,373.0 |
| Total Workyears | 277.0 | 304.5 | 259.5 | -45.0 |

**Program Project Description:**

Leaking Underground Storage Tanks (LUST) resources in the Acquisition Management program support the Agency's contract activities.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/ Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. Acquisition Management resources in LUST support information technology needs and the training and development of EPA's acquisition workforce.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1.0) This change to fixed and other costs is an increase due to an adjustment in essential workforce support.

- (-$9.0) This program change reflect a minimal reduction in contractual resources from more effective business practices in the Acquisition Management program.

**Statutory Authority:**

Office of Federal Procurement Policy Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

**Central Planning, Budgeting, and Finance**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $73,003.2 | $71,493.0 | $68,635.0 | -$2,858.0 |
| ***Leaking Underground Storage Tanks*** | ***$373.2*** | ***$404.0*** | ***$420.0*** | ***$16.0*** |
| Hazardous Substance Superfund | $22,511.4 | $21,345.0 | $21,152.0 | -$193.0 |
| Total Budget Authority | $95,887.8 | $93,242.0 | $90,207.0 | -$3,035.0 |
| Total Workyears | 450.5 | 493.4 | 430.6 | -62.8 |

**Program Project Description:**

EPA's financial management community maintains a strong partnership with the Leaking Underground Storage Tanks (LUST) program. Activities under the Central Planning, Budgeting and Finance program support the management of integrated planning, budgeting, financial management, performance and accountability processes, and systems to ensure effective stewardship of LUST resources. This includes developing, managing, and supporting a performance management system consistent with the Government Performance and Results Modernization Act for the Agency that involves: strategic planning and accountability for environmental, fiscal, and managerial results; providing policy, systems, training, reports, and oversight essential for the financial operations of EPA; managing the agencywide Working Capital Fund; providing financial payment and support services for EPA through three finance centers, specialized fiscal and accounting services for the LUST programs; and managing the Agency's annual budget process.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 - 2022 Strategic Plan. EPA will continue to ensure sound financial and budgetary management of the LUST program through the use of routine and ad hoc analysis, statistical sampling, and other evaluation tools. Building on the work begun in previous years, EPA will continue to monitor and strengthen internal controls with a focus on sensitive payments and property. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

**Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$90.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support and benefit costs.

- (-$74.0/ -0.7 FTE) This net program change reduces ad hoc analyses as part of the LUST financial management efforts.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute).

**Facilities Infrastructure and Operations**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $293,997.9 | $305,844.0 | $300,738.0 | -$5,106.0 |
| Science & Technology | $64,642.7 | $67,875.0 | $68,834.0 | $959.0 |
| Building and Facilities | $26,065.5 | $27,602.0 | $33,377.0 | $5,775.0 |
| ***Leaking Underground Storage Tanks*** | ***$502.2*** | ***$793.0*** | ***$773.0*** | ***-$20.0*** |
| Inland Oil Spill Programs | $376.2 | $580.0 | $665.0 | $85.0 |
| Hazardous Substance Superfund | $69,651.3 | $75,985.0 | $74,144.0 | -$1,841.0 |
| Total Budget Authority | $455,235.8 | $478,679.0 | $478,531.0 | -$148.0 |
| Total Workyears | 323.4 | 356.7 | 318.0 | -38.7 |

**Program Project Description:**

EPA's Facilities Infrastructure and Operations program in the Leaking Underground Storage Tank (LUST) appropriation supports the Agency's rent, transit subsidy, and facilities management services. Funding is allocated for such services among the major appropriations for the Agency.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and other private landlords. For FY 2019, EPA is requesting a total of $0.60 million for rent in the LUST appropriation.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$12.0) This change to fixed and other costs is a decrease due to the recalculation of rent and transit subsidy.

- (-$8.0) This program change is a decrease to basic operations and maintenance costs.

**Statutory Authority:**

Federal Property and Administration Services Act; Public Building Act; Robert T. Stafford Disaster Relief and Emergency Assistance Act; Clean Water Act; Clean Air Act; Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Community Environmental Response Facilitation Act (CERFA); Energy Policy Act of 2005; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $10,654.3 | $11,218.0 | $5,615.0 | -$5,603.0 |
| ***Leaking Underground Storage Tanks*** | ***$9,554.5*** | ***$9,177.0*** | ***$6,452.0*** | ***-$2,725.0*** |
| Total Budget Authority | $20,208.8 | $20,395.0 | $12,067.0 | -$8,328.0 |
| Total Workyears | 98.8 | 108.1 | 68.8 | -39.3 |

**Program Project Description:**

The Leaking Underground Storage Tank (LUST) resources in the LUST/Underground Storage Tank (UST) program ensures that petroleum contamination is properly assessed and cleaned up. Under this program, EPA issues, monitors, and oversees LUST cleanup cooperative agreements to states.[2] EPA also provides technical assistance and training to states and tribes on how to conduct cleanups and improve the efficiency of state programs. At the end of FY 2017, approximately 68,000 LUST sites had not achieved cleanup completion.[3]

In addition, EPA has direct implementation authority and responsibilities in Indian country. In that role, EPA oversees cleanups by responsible parties, conducts site assessments, remediates contaminated water and soil, and provides alternative sources of drinking water when needed. EPA's funding for Indian country is the primary source of money for these activities. With few exceptions, tribes do not have independent program resources to pay for assessing and cleaning up UST releases, and in many cases, there are no responsible parties available to pay for the cleanups at sites in Indian country.

Cleaning up LUST sites protects people from exposure to contaminants such as benzene, a known carcinogen, and makes land available for reuse. In 2016, EPA released a study called "Property Value Study of High-Profile UST Release Sites." The purpose of the study was to determine the impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values 3 to 6 percent. Then, once a cleanup is completed, nearby property values rebound by a similar margin.[4] In FY 2017, cleanups were completed at 8,775 LUST sites.

[2] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[3] For more information, visit: http://www.epa.gov/ust/ust-performance-measures.
[4] Guignet, D., R. Jenkins, M. Ranson, and P. Walsh. Do Housing Values Respond to Underground Storage Tank Releases? Evidence from High-Profile Cases across the United States. NCEE Working Paper No. 2016-01. March 2016. For more information, visit: https://yosemite.epa.gov/EE/epa/eed.nsf/WPNumber/2016-01?opendocument.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will:

- Work with states and tribes within available resources to implement strategies to reduce the number of sites that have not reached cleanup completion, and to address new releases as they continue to be confirmed.

- Provide targeted training to states and tribes, such as remediation process optimization and rapid site assessment techniques.

- Monitor the soundness of financial mechanisms, in particular insurance and state cleanup funds that serve as financial assurance for LUST releases. EPA works with states to seek ways to cover and control remediation costs.

- Provide support in Indian country for site assessments, investigations, and remediation of high priority sites; enforcement against responsible parties; cleanup of soil and groundwater; alternate water supplies; cost recovery against UST owners and operators; oversight of responsible party lead cleanups; and technical expertise and assistance to Tribal governments.

**Performance Measure Targets:**

| (113) Number of LUST cleanups completed in Indian country that meet risk-based standards for human exposure and groundwater migration. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 16 | 16 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$439.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$3,164.0/ -12.1 FTE) This program change reflects a focus on cleaning up the highest priority LUST sites in Indian country and a reduction in resources that provide subject matter and technical expertise to states and tribes.

**Statutory Authority:**

Resource Conservation and Recovery Act, § 8001, 9001-9014.

**LUST Cooperative Agreements**
Program Area: Underground Storage Tanks (LUST / UST)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Leaking Underground Storage Tanks*** | ***$55,320.2*** | ***$54,666.0*** | ***$38,840.0*** | ***-$15,826.0*** |
| Total Budget Authority | $55,320.2 | $54,666.0 | $38,840.0 | -$15,826.0 |

**Program Project Description:**

This funding is used to award cooperative agreements to states[5] to implement the Leaking Underground Storage Tank (LUST) program. The LUST program ensures that petroleum contamination is properly assessed and cleaned up by providing states with funding to address releases. LUST funding supports states in managing, overseeing, and enforcing cleanups at LUST sites. This is achieved by focusing on increasing the efficiency of LUST cleanups nationwide, leveraging private and state resources, and enabling community redevelopment. Cleaning up LUST sites protects people from exposure to contaminants, and makes land available for reuse.

EPA's backlog study characterized the national inventory of sites that have not reached cleanup completion. The study found that almost half of the releases were 15 years old or older, and that groundwater was contaminated at 75 percent of these sites. Remediating groundwater contamination is often more technically complex, takes longer, and is more expensive than remediating soil contamination.[6] Remediation costs average between $100,000 and $400,000 per underground storage tank (UST) release, the cost increasing with the presence of groundwater contamination. Potential adverse effects from chemicals such as benzene, methyl-tertiary-butyl-ether (MTBE), alcohols, or lead scavengers in gasoline contribute to the importance of cleaning up these contaminants and increase the cost of cleaning up these sites.[7]

In 2016, EPA released a study called "Property Value Study of High-Profile UST Release Sites." The purpose of the study was to determine the impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values 3 to 6 percent. Once a cleanup is completed, nearby property values rebound by a similar margin.[8]

[5] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[6] See *The National LUST Cleanup Backlog: A Study Of Opportunities*, September 2011, http://www.epa.gov/ust/national-lust-cleanup-backlog-study-opportunities.
[7] See *Technologies for Treating MtBE and Other Fuel Oxygenates*, May 2004, pages 2-6 and 2-7, https://clu-in.org/download/remed/542r04009/542r04009.pdf.
[8] Guignet, D., R. Jenkins, M. Ranson, and P. Walsh. Do Housing Values Respond to Underground Storage Tank Releases? Evidence from High-Profile Cases across the United States. NCEE Working Paper No. 2016-01. March 2016. https://yosemite.epa.gov/EE/epa/eed.nsf/WPNumber/2016-01?opendocument.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will:

- Work with states to implement strategies to reduce the backlog by targeting high priority sites, considering best practices, and increasing redevelopment efforts. Approximately, 68,000 releases remain that have not reached cleanup completion. In addition, thousands of new releases are discovered each year.[9]

- Provide resources to states to perform core cleanup work. Some states also may be able to pursue other means to maximize the effectiveness or efficiency in protectively completing cleanups and reducing their backlogs.

- Collaborate with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion, and leverage best practices and support management, guidance, and enforcement activities.

The Energy Policy Act (EPAct) of 2005 requires that states receiving LUST Cooperative Agreements funding meet certain release prevention requirements, such as inspecting every facility at least once every three years. In FY 2019, EPA will factor state compliance with EPAct requirements into LUST Cleanup Cooperative Agreement decisions.

**Performance Measure Targets:**

| (112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 11,200 | 11,200 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$15,826.0) This program change reflects a focus on cleaning up the highest priority sites.

**Statutory Authority:**

Energy Policy Act (EPAct) of 2005; Resource Conservation and Recovery Act, § 9003(h)(7).

[9] For more information, visit: http://www.epa.gov/ust/ust-performance-measures.

**LUST Prevention**

Program Area: Underground Storage Tanks (LUST / UST)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Leaking Underground Storage Tanks*** | ***$25,305.9*** | ***$25,197.0*** | ***$0.0*** | ***-$25,197.0*** |
| Total Budget Authority | $25,305.9 | $25,197.0 | $0.0 | -$25,197.0 |

**Program Project Description:**

The Leaking Underground Storage Tank (LUST) Prevention program works to ensure that groundwater is protected from petroleum and associated chemicals leaking from underground storage tanks (USTs), while the LUST Cooperative Agreement program provides funding to states to assess and clean up LUST sites. This program has provided funding to states,[10] tribes, and/or intertribal consortia to inspect, prevent releases, ensure compliance with federal and state laws, and enforce these laws for the 555,079 federally regulated active USTs. The Energy Policy Act (EPAct) of 2005 requires EPA or states to inspect every UST once every three years.

**FY 2019 Activities and Performance Plan:**

Resources have been proposed for elimination for this program in FY 2019. States could elect to maintain core program work with state resources rather than federal.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$25,197.0) This funding change proposes to eliminate the LUST Prevention grant program.

**Statutory Authority:**

Energy Policy Act (EPAct) of 2005; Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.

[10] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

# Research: Sustainable Communities

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Science & Technology | $142,429.1 | $133,415.0 | $52,549.0 | -$80,866.0 |
| ***Leaking Underground Storage Tanks*** | ***$358.0*** | ***$318.0*** | ***$320.0*** | ***$2.0*** |
| Inland Oil Spill Programs | $653.4 | $659.0 | $516.0 | -$143.0 |
| Hazardous Substance Superfund | $12,717.6 | $11,385.0 | $10,885.0 | -$500.0 |
| Total Budget Authority | $156,158.1 | $145,777.0 | $64,270.0 | -$81,507.0 |
| Total Workyears | 459.7 | 476.3 | 294.1 | -182.2 |

**Program Project Description:**

EPA's Sustainable and Healthy Communities (SHC) research program under the Leaking Underground Storage Tanks (LUST) appropriation provides federal, regional and community decision-makers with tools, methods, and information to prevent and control pollution at LUST sites. Specifically, this research enables decision-makers to better:

- Assess sites and evaluate the implications of alternative remediation techniques, policies, and management actions to assess and cleanup leaks at fueling stations;
- Identify the environmental impacts and unintended consequences of existing and new biofuels available in the marketplace; and
- Protect America's land and groundwater resources and drinking water supplies that could be impacted by the nation's approximately 600 thousand underground fuel storage tanks.[11]

**Recent accomplishments in this research area include:**

- **Developing Field Screening Methodology to Assess Petroleum Vapor Intrusion:** SHC has developed field screening methods to assist in the implementation of EPA's guide for petroleum vapor intrusion. The screening methodology and software tool provides site managers with an economical and practical approach for addressing petroleum vapor intrusion in their site cleanup plans.

- **Analyzing Three National Databases to Assess Variability in Fuel Composition**. In recent years, varying fuel composition has been associated with vapor and liquid releases from underground storage tanks and corrosion of tank components. SHC's study increases EPA's understanding on the fate and transport of contaminants from LUST sites and their potential impact on groundwater contamination and vapor intrusion.

[11] For more information, see: https://www.epa.gov/ust.

- **Estimating Site Densities of Private Domestic Wells (PDWs)**. PDWs are not subject to the testing requirements of the Safe Drinking Water Act and are therefore more vulnerable to contamination (e.g., susceptible sub-populations). For public health and planning purposes, it is important to determine the locations of high density PDW use. The SHC program's research and information on PDWs assists states in triaging their inspections to address potential vulnerabilities to communities that are reliant on these drinking water supplies.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. Specifically, this work will aim to characterize sites and contaminants released from leaking underground storage tanks identified under the LUST trust fund with an emphasis on assisting the Agency and the states in addressing the backlog of sites for remediation. This research also will help communities remediate contaminated sites at an accelerated pace and lower costs while reducing human health and ecological impacts. Resulting methodologies and tools will help localities and states return properties to productive use, thus supporting the Agency mission of protecting human health and the environment in the context of communities. Such work is integral to achieving the Administrator's priority of revitalizing land and preventing contamination.

EPA's scientists also will continue to work with its Underground Storage Tanks program to deliver improved characterization and remediation methods for fuels released from leaking underground storage tanks. Research will address contaminant plume elongation and the associated risks to communities from the many underground storage tanks at fueling stations located near residences and residential water supplies. This research will inform tool development to assist communities, states, and tribes to determine what remediation is needed to protect local ground water resources and reduce the potential for vapor intrusion into buildings. These tools will ultimately reduce costs to communities while better protecting future drinking water resources and preventing vapor intrusion. In FY 2019, EPA scientists plan to produce software and user's guides for evaluating transport from released gasoline. These models will provide technical guidance for LUST remediation efforts.

**Performance Measure Targets:**

Work under this program supports performance results in the Sustainable and Healthy Communities Program under the S&T appropriation. EPA has a standing subcommittee under ORD's Board of Scientific Counselors (BOSC) for the SHC program to evaluate its performance and provide feedback to the Agency. The SHC program will meet regularly with both the BOSC and Science Advisory Board over the next several years to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on its strategic research direction midway through the 4-year cycle of Strategic Research Action Plans (StRAPs).

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, U.S. Department of Agriculture and the White House's Office of Science and Technology Policy to assess research performance. EPA's Office of Research and Development's (ORD's) state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies. Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials. EPA supports the interagency Science and Technology in America's Reinvestment, Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) efforts.[12]

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$7.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5.0) This program change decreases research to characterize and remediate contaminated leaking underground storage tank sites.

**Statutory Authority:**

Resource Conservation and Recovery Act, §§ 1002, 1006, 8001; Safe Drinking Water Act, § 1442.

[12] STAR METRICS: https://www.starmetrics.nih.gov/.

**Environmental Protection Agency**
**2019 Annual Performance Plan and Congressional Justification**

**Table of Contents – Inland Oil Spill Programs**

## APPROPRIATION: Inland Oil Spill Programs
## Resource Summary Table
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Inland Oil Spill Programs** | | | | |
| Budget Authority | $17,940.1 | $18,085.0 | $15,673.0 | -$2,412.0 |
| Total Workyears | 92.4 | 98.3 | 75.7 | -22.6 |

## Bill Language: Inland Oil Spill Programs

*For expenses necessary to carry out the Environmental Protection Agency's responsibilities under the Oil Pollution Act of 1990, $15,673,000, to be derived from the Oil Spill Liability trust fund, to remain available until expended.*

## Program Projects in Inland Oil Spill Programs
(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Compliance | | | | |
| Compliance Monitoring | $145.2 | $138.0 | $0.0 | -$138.0 |
| Enforcement | | | | |
| Civil Enforcement | $2,342.8 | $2,397.0 | $2,219.0 | -$178.0 |
| Oil | | | | |
| Oil Spill: Prevention, Preparedness and Response | $14,422.5 | $14,311.0 | $12,273.0 | -$2,038.0 |
| Operations and Administration | | | | |
| Facilities Infrastructure and Operations | $376.2 | $580.0 | $665.0 | $85.0 |
| Research: Sustainable Communities | | | | |
| Research: Sustainable and Healthy Communities | $653.4 | $659.0 | $516.0 | -$143.0 |
| **TOTAL Inland Oil Spill Programs** | **$17,940.1** | **$18,085.0** | **$15,673.0** | **-$2,412.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Compliance

**Compliance Monitoring**
Program Area: Compliance
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $98,283.6 | $100,975.0 | $86,374.0 | -$14,601.0 |
| ***Inland Oil Spill Programs*** | ***$145.2*** | ***$138.0*** | ***$0.0*** | ***-$138.0*** |
| Hazardous Substance Superfund | $1,028.8 | $988.0 | $988.0 | $0.0 |
| Total Budget Authority | $99,457.6 | $102,101.0 | $87,362.0 | -$14,739.0 |
| Total Workyears | 506.4 | 538.9 | 428.7 | -110.2 |

**Program Project Description:**

The Compliance Monitoring program is a key component of EPA's compliance assurance program that allows the Agency to detect noncompliance and promotes compliance with the nation's environmental laws.

Under the Inland Oil Spills Trust Fund, EPA integrates the data from the Facility Response Plans and Spill Prevention, Control, and Countermeasure systems into EPA's Integrated Compliance Information System. As a result of this data integration, EPA is able to focus compliance monitoring resources on areas of highest risk and increase transparency to the public. It also provides a more complete set of information for this program and improves data quality.

**FY 2019 Activities and Performance Plan:**

The Compliance Monitoring program funded from the Inland Oil Spills Trust Fund is proposed to be eliminated in FY 2019 due to streamlining of the program. The Agency's Office of Land and Emergency Management will maintain this work.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$138.0/ -0.9 FTE) This change proposes to eliminate funding to the Compliance Monitoring program under the Inland Oil Spills Trust Fund due to streamlining of the program.

**Statutory Authority:**

Clean Water Act; Oil Pollution Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic authority).

# Enforcement

**Civil Enforcement**
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $172,309.6 | $170,849.0 | $140,677.0 | -$30,172.0 |
| Leaking Underground Storage Tanks | $584.7 | $616.0 | $589.0 | -$27.0 |
| ***Inland Oil Spill Programs*** | ***$2,342.8*** | ***$2,397.0*** | ***$2,219.0*** | ***-$178.0*** |
| Total Budget Authority | $175,237.1 | $173,862.0 | $143,485.0 | -$30,377.0 |
| Total Workyears | 1,061.0 | 1,080.4 | 857.1 | -223.3 |

**Program Project Description:**

The Civil Enforcement program's goal is to ensure compliance with the nation's environmental laws to protect human health and the environment. The program collaborates with the United States Department of Justice, states, local agencies, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

The Civil Enforcement program's enforcement of Section 311 of the Clean Water Act (CWA), as amended by the Oil Pollution Act of 1990 (OPA), is designed to ensure compliance with the prohibition against oil and hazardous substance spills, as well as the oil spill prevention, response planning, and other regulatory requirements. The Civil Enforcement program develops policies, issues administrative orders or penalty actions, and refers civil judicial actions to the Department of Justice to address spills, violations of spill prevention regulations, response planning regulations and other violations (e.g., improper dispersant use or noncompliance with orders). The program also assists in the recovery of cleanup costs expended by the government. The program provides support for field investigations of spills, Spill Prevention, Control, and Countermeasure (SPCC), Facility Response Plan (FRP) and other requirements.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to streamline the Civil Enforcement program, prioritize resources to achieve regulatory compliance, and address oil or hazardous substance spills in violation of the statute and deter future spills. Civil Enforcement efforts will focus on facilities where enforcement will promote deterrence, and confirm that spills are cleaned up and mitigated. To increase deterrence, the Civil Enforcement program will coordinate with the Criminal Enforcement program, as appropriate.

**Performance Measure Targets:**

Work under this program supports performance results in the Civil Enforcement program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$16.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$194.0/ -0.9 FTE) This program change reflects increased coordination with the Criminal Enforcement program in carrying out enforcement of the Oil Pollution Act of 1990.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic authority); Clean Water Act; Oil Pollution Act.

# Oil

## Oil Spill: Prevention, Preparedness and Response

Program Area: Oil
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Inland Oil Spill Programs*** | ***$14,422.5*** | ***$14,311.0*** | ***$12,273.0*** | ***-$2,038.0*** |
| Total Budget Authority | $14,422.5 | $14,311.0 | $12,273.0 | -$2,038.0 |
| Total Workyears | 78.0 | 83.1 | 62.3 | -20.8 |

### Program Project Description:

The Oil Spill Prevention, Preparedness and Response program protects the American people by preventing, preparing for, responding to, and monitoring inland oil spills. EPA is the lead federal responder for inland oil spills, including transportation related spills from pipelines, trucks, railcars, and other transportation systems. In addition, the program may provide technical assistance, assets, and outreach to industry, states, and local communities as part of the Agency's effort to ensure national safety and security for chemical and oil incidents.[1]

There are approximately 540,000 Spill Prevention, Control, and Countermeasure (SPCC) facilities, including a subset of 4,600 Facility Response Plan (FRP) facilities identified as high risk due to their size and location. The Oil Pollution Act requires certain facilities that store and use oil to prepare response plans that are reviewed by EPA to ensure availability of response resources in the event of a discharge.

To minimize the potential impacts to human health and the environment, the Agency will target facilities that pose the highest risk. The Agency currently inspects approximately .08 percent of SPCC facilities per year. In FY 2017, EPA found that 82 percent of FRP facilities and 77 percent of SPCC facilities inspected had inadequate prevention and response plans. Inspections are essential in ensuring that facility staff is knowledgeable about prevention and response plans, and quickly able to put these plans into action.

EPA is the lead federal response agency for oil spills occurring in inland waters. EPA receives all spill notifications at the National Response Center and retains the responsibility to ensure that all inland oil spills are responded to within 12 hours. EPA works closely with state and local first responders on smaller spills and leads the response on larger spills. EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard, to obtain reimbursement funds for site specific oil spill response activities. In FY 2017 EPA responded to approximately 85 oil spills across the nation.

[1] For additional information, refer to: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the Oil Spill Prevention, Preparedness and Response program will:

- Inspect oil facilities to ensure compliance with preventive measures. Inspections involve reviewing the facility's preparedness and response plans, discussing key aspects of these plans with facility staff, and conducting unannounced exercises that test the facility owner's ability to put these preparedness and response plans into action. EPA will focus inspections at high risk FRP facilities.

- Maintain the National Contingency Plan's Subpart J product schedule, which identifies a list of products that may be used to clean oil spills.

- Maintain the National Oil Database, which compiles data for the program. The database manages information obtained from new and historical inspections and has streamlined the process for assisting facilities with compliance and equip inspectors with more efficient inspection processes.

- Deliver required annual oil spill inspector training to federal and state inspectors.

EPA is proposing to develop a new program that would authorize EPA to collect and use fees for compliance assistance. This fee and service will be voluntary and EPA would conduct an on-site walk through within one-year of the accepted request and provide a report to assist FRP and SPCC facilities in complying with EPA regulations. Authorizing language is proposed with the budget submission.

**Performance Measure Targets:**

| (438) Number of inspections conducted at oil facilities subject to the Spill Prevention, Control and Countermeasure regulation. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 410 | 410 |

| (437) Number of inspections conducted at oil facilities subject to the Facility Response Plan regulation. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 200 | 200 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$1,219.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$3,257.0/ -20.8 FTE) This program change is a focus on SPCC and FRP facility inspections on facilities that pose the highest risk. It also reduces specialized training opportunities for Agency federal On Scene Coordinators and updates to regional Area Contingency Plans.

**Statutory Authority:**

The Clean Water Act, § 311 and the Oil Pollution Act.

# Operations and Administration

**Facilities Infrastructure and Operations**
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $293,997.9 | $305,844.0 | $300,738.0 | -$5,106.0 |
| Science & Technology | $64,642.7 | $67,875.0 | $68,834.0 | $959.0 |
| Building and Facilities | $26,065.5 | $27,602.0 | $33,377.0 | $5,775.0 |
| Leaking Underground Storage Tanks | $502.2 | $793.0 | $773.0 | -$20.0 |
| ***Inland Oil Spill Programs*** | ***$376.2*** | ***$580.0*** | ***$665.0*** | ***$85.0*** |
| Hazardous Substance Superfund | $69,651.3 | $75,985.0 | $74,144.0 | -$1,841.0 |
| Total Budget Authority | $455,235.8 | $478,679.0 | $478,531.0 | -$148.0 |
| Total Workyears | 323.4 | 356.7 | 318.0 | -38.7 |

**Program Project Description:**

EPA's Facilities Infrastructure and Operations program in the Inland Oil Spill Response appropriation supports the Agency's rent, transit subsidy, and facility operations. Funding is allocated for such services among the major appropriations for the Agency.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and other private landlords. For FY 2019, EPA is requesting $0.496 million for rent in the Inland Oil Spills appropriation.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$78.0) This change to fixed and other costs is an increase due to the recalculation of rent charged by appropriation, offset by a decrease in transit subsidy.

- (+$7.0) This program change is an increase for facility operations.

**Statutory Authority:**

Federal Property and Administration Services Act; Public Building Act; Robert T. Stafford Disaster Relief and Emergency Assistance Act; Clean Water Act; Clean Air Act; Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Community Environmental Response Facilitation Act (CERFA); Energy Policy Act of 2005; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

# Research: Sustainable Communities

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Science & Technology | $142,429.1 | $133,415.0 | $52,549.0 | -$80,866.0 |
| Leaking Underground Storage Tanks | $358.0 | $318.0 | $320.0 | $2.0 |
| ***Inland Oil Spill Programs*** | ***$653.4*** | ***$659.0*** | ***$516.0*** | ***-$143.0*** |
| Hazardous Substance Superfund | $12,717.6 | $11,385.0 | $10,885.0 | -$500.0 |
| Total Budget Authority | $156,158.1 | $145,777.0 | $64,270.0 | -$81,507.0 |
| Total Workyears | 459.7 | 476.3 | 294.1 | -182.2 |

**Program Project Description:**

EPA is the lead federal on-scene coordinator for inland oil spills and provides technical assistance, when needed, for coastal spills. EPA is therefore charged with responsibilities for oil spill preparedness and response and associated research. EPA's research, planned in concert with partner agencies (the U.S. Coast Guard, Department of the Interior, Department of Transportation, and Department of Commerce) supports EPA's lead role in developing protocols for testing spill response products and agents.

The Sustainable and Healthy Communities (SHC) research program for inland oil spills, funded through the Oil Spill Liability Trust Fund,[2] provides federal, regional, state, tribal, and community decision-makers with analysis and tools to protect human and ecosystem health from the negative impacts of oil spills. EPA provides assistance to communities by supporting local officials in their response to a spill. As a result of this research, responders can make better decisions on approaches and methods to reduce the spread and impact of coastal and inland oil spills, including pipeline and railway spills. Additionally, EPA's remediation expertise is critical in addressing potential impacts to communities and their environmental resources associated with pipeline and railway oil spills.

In support of these response efforts, EPA conducts research related to the Agency's National Contingency Plan (NCP) Product Schedule.[3] The NCP is used nationwide by emergency responders and federal agencies in responding to oil spills. EPA's role is to develop and evaluate response approaches involving bioremediation, dispersants, and other additives, and to assess impacts to surface water and groundwater, especially as they affect drinking water supplies. EPA relies on this research to provide testing procedures that inform cleanup decisions during an emergency spill response.

[2] For more information, see: http://www.uscg.mil/ccs/npfc/About_NPFC/osltf.asp.
[3] For more information, see: http://www2.epa.gov/emergency-response/national-contingency-plan-subpart-j.

**Recent accomplishments in this research area include:**

- **Developing an Oil Surface Washing Agent Protocol**: Surface Washing Agents (SWAs), also known as shoreline cleaning agents, are listed in the NCP and can be used following an oil spill event to enhance the removal of stranded oil from shoreline surfaces. EPA has and will continue to develop a laboratory effectiveness test for SWA. The effectiveness test will serve as a basis for proposed new listing criteria for the SWA products in the NCP. A product derived from this protocol is slated for FY 2019.

- **Providing the Land and Emergency Management Program with Information on Biodegradability for Crude Oils and Dispersants:** EPA's research results in this area inform decision makers on how long surfactant chemicals can potentially persist in the environment after use in responding to an oil spill, thus supporting the Agency's goal of protecting communities. This information was delivered in the fourth quarter of 2017.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. More specifically, SHC's FY 2019 research will focus explicitly on conducting research to support regulatory activities and protocol development for the National Oil and Hazardous Substances Pollution Contingency Plan and provide on-demand technical support at federal-, tribal-, or state-managed cleanup sites, as well as assistance during emergencies. The program conducts health, environmental engineering, and ecological research and prepares planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes.

Specific SHC activities in FY 2019 include:

- Developing or revising protocols to test oil spill control agents or products for listing on the National Contingency Plan (NCP) Product Schedule and will conduct other research, as needed by EPA's Emergency Management Program.
- Conducting studies on the effectiveness of bioremediation of petroleum-based oil, vegetable oil, and biodiesel. Bioremediation is a treatment that uses naturally occurring organisms to breakdown hazardous substances into less toxic or nontoxic substances to improve clean up.
- Researching dispersants' performance and behavior in deep water and arctic spills, in collaboration with the Department of the Interior's Bureau of Safety and Environmental Enforcement (BSEE) and Canada's Department of Fisheries and Oceans.

EPA scientists will produce a report on surface washing agents, solidifiers, and oil herding agents used in salt and freshwater responsive to Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) during FY 2019. EPA also will expand research efforts regarding oil biodegradation and the characterization of crude oil.

**Performance Measure Targets:**

Work under this program supports performance results in the Sustainable and Healthy Communities Program under the S&T appropriation. EPA is reconstituting a subcommittee under the Office of Research and Development's (ORD) Board of Scientific Counselors (BOSC) for the SHC program to evaluate its performance and provide feedback to the Agency. The SHC program will meet regularly with both the BOSC and Science Advisory Board over the next several years to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on its strategic research direction midway through the 4-year cycle of Strategic Research Action Plans (StRAPs).

EPA collaborates with several science agencies and the research community to assess our research performance. For example, EPA is partnering with National Institutes of Health, the National Science Foundation, Department of Energy, and Department of Agriculture. ORD's state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies. Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials. The Agency also works with the White House's Office of Science and Technology Policy and supports the interagency Science and Technology in America's Reinvestment - Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) effort.[4]

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$16.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$159.0) This program change streamlines research to study the performance and behavior of oil dispersants in deep water and arctic spills, as well as revised protocols for testing oil spill control agents pursuant to the National Contingency Plan Product Schedule.

**Statutory Authority:**

Oil Pollution Act; Clean Water Act, § 311.

[4] STAR METRICS: https://www.starmetrics.nih.gov/.

**Environmental Protection Agency**
**2019 Annual Performance Plan and Congressional Justification**

**Table of Contents – State and Tribal Assistance Grants**

## APPROPRIATION: State and Tribal Assistance Grants
## Resource Summary Table

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **State and Tribal Assistance Grants** | | | | |
| Budget Authority | $3,557,752.4 | $3,503,209.0 | $2,929,467.0 | -$573,742.0 |
| Total Workyears | 4.9 | 0.0 | 0.0 | 0.0 |

## Bill Language: STAG

*For environmental programs and infrastructure assistance, including capitalization grants for State revolving funds and performance partnership grants, $2,929,467,000 to remain available until expended, of which—*

*(1) $1,393,887,000 shall be for making capitalization grants for the Clean Water State Revolving Funds under title VI of the Federal Water Pollution Control Act; and of which $863,233,000 shall be for making capitalization grants for the Drinking Water State Revolving Funds under section 1452 of the Safe Drinking Water Act: Provided, That notwithstanding section 603(d)(7) of the Federal Water Pollution Control Act, the limitation on the amounts in a State water pollution control revolving fund that may be used by a State to administer the fund shall not apply to amounts included as principal in loans made by such fund in fiscal year 2019 and prior years where such amounts represent costs of administering the fund to the extent that such amounts are or were deemed reasonable by the Administrator, accounted for separately from other assets in the fund, and used for eligible purposes of the fund, including administration:*

*Provided further, That for fiscal year 2019, notwithstanding the provisions of subsections (g)(1), (h), and (l) of section 201 of the Federal Water Pollution Control Act, grants made under title II of such Act for American Samoa, Guam, the commonwealth of the Northern Marianas, the United States Virgin Islands, and the District of Columbia may also be made for the purpose of providing assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment works; and (2) for the construction, repair, or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments:*

*Provided further, That for fiscal year 2019, notwithstanding the provisions of such subsections (g)(1), (h), and (l) of section 201 and section 518(c) of the Federal Water Pollution Control Act, funds reserved by the Administrator for grants under section 518(c) of the Federal Water Pollution Control Act may also be used to provide assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment works; and (2) for the construction, repair, or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments:*

*Provided further, That for fiscal year 2019, notwithstanding any provision of the Federal Water Pollution Control Act and regulations issued pursuant thereof, up to a total of $2,000,000 of the funds reserved by the Administrator for grants under section 518(c) of such Act may also be used for grants for training, technical assistance, and educational programs relating to the operation and management of the treatment works specified in section 518(c) of such Act:*

*Provided further, That for fiscal year 2019, funds reserved under section 518(c) of such Act shall be available for grants only to Indian tribes, as defined in section 518(h) of such Act and former Indian reservations in Oklahoma (as determined by the Secretary of the Interior) and Native Villages as defined in Public Law 92–203:*

*Provided further, That for fiscal year 2019, notwithstanding the limitation on amounts in section 518(c) of the Federal Water Pollution Control Act, up to a total of 2 percent of the funds appropriated, or $30,000,000, whichever is greater, and notwithstanding the limitation on amounts in section 1452(i) of the Safe Drinking Water Act, up to a total of 2 percent of the funds appropriated, or $20,000,000, whichever is greater, for State Revolving Funds under such Acts may be reserved by the Administrator for grants under section 518(c) and section 1452(i) of such Acts:*

*Provided further, That for fiscal year 2019, notwithstanding the amounts specified in section 205(c) of the Federal Water Pollution Control Act, up to 1.5 percent of the aggregate funds appropriated for the Clean Water State Revolving Fund program under the Act less any sums reserved under section 518(c) of the Act, may be reserved by the Administrator for grants made under title II of the Federal Water Pollution Control Act for American Samoa, Guam, the Commonwealth of the Northern Marianas, and United States Virgin Islands:*

*Provided further, That for fiscal year 2019, notwithstanding the limitations on amounts specified in section 1452(j) of the Safe Drinking Water Act, up to 1.5 percent of the funds appropriated for the Drinking Water State Revolving Fund programs under the Safe Drinking Water Act may be reserved by the Administrator for grants made under section 1452(j) of the Safe Drinking Water Act:*

*Provided further, That notwithstanding 22 U.S.C. 1383(i)(3)(A), not less than 10 percent but not more than 20 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants and not less than 20 percent but not more than 30 percent of the funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants shall be used by the State to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these), and shall be so used by the State only where such funds are provided as initial financing for an eligible recipient or to buy, refinance, or restructure the debt obligations of eligible recipients only where such debt was incurred on or after the date of enactment of this Act;*

*(2) $3,000,000 shall be for grants to the State of Alaska to address drinking water and wastewater infrastructure of rural and Alaska Native Villages: Provided, That of these funds: (A) the State of*

*Alaska shall provide a match of 25 percent; (B) no more than 5 percent of the funds may be used for administrative and overheard expenses; and (C) the State of Alaska shall make awards consistent with the Statewide priority list established in conjunction with the Agency and the U.S. Department of Agriculture for all water, sewer, waste disposal, and similar projects carried out by the State of Alaska that are funded under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301) or the Consolidated Farm and Rural Development Act (7 U.S.C. 1921 et seq.) which shall allocate not less than 25 percent of the funds provided for projects in regional hub communities;*

*(3) $62,000,000 shall be to carry out section 104(k) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including grants, interagency agreements, and associated program support costs: Provided, That not more than 25 percent of the amount appropriated to carry out section 104(k) of CERCLA shall be used for site characterization, assessment, and remediation of facilities described in section 101(39)(D)(ii)(II) of CERCLA;*

*(4) $10,000,000 shall be for grants under title VII, subtitle G of the Energy Policy Act of 2005; and*

*(5) $597,347,000 shall be for grants, including associated program support costs, to States, federally recognized tribes, interstate agencies, tribal consortia, and air pollution control agencies for multi-media or single media pollution prevention, control and abatement and related activities, including activities pursuant to the provisions set forth under this heading in Public Law 104–134, and for making grants under sections 103 and 105 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator, of which: $31,791,000 shall be for carrying out section 128 of CERCLA; $6,422,000 shall be for Environmental Information Exchange Network grants, including associated program support costs; $11,884,000[1] of the funds available for grants under section 106 of the Federal Water Pollution Control Act shall be for State participation in national- and State-level statistical surveys of water resources and enhancements to State monitoring programs; $27,000,000 shall be for Multipurpose Grants for the implementation of mandatory statutory duties in delegated environmental programs.*

**Program Projects in STAG**
(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| State and Tribal Assistance Grants (STAG) | | | | |
| Infrastructure Assistance: Alaska Native Villages | $20,083.7 | $19,864.0 | $3,000.0 | -$16,864.0 |

[1] The language in the fifth proviso corrects an error in the Budget Appendix that was not identified prior to typesetting of the President's Budget. The proviso should read "**$11,884,000** of the funds available for grants under section 106 of the Federal Water Pollution Control Act …" instead of "**$153,683,000**…" as stated in the Appendix.

| | | | | |
|---|---|---|---|---|
| Brownfields Projects | $88,370.2 | $79,457.0 | $62,000.0 | -$17,457.0 |
| Infrastructure Assistance: Clean Water SRF | $1,380,738.8 | $1,384,421.0 | $1,393,887.0 | $9,466.0 |
| Infrastructure Assistance: Drinking Water SRF | $944,392.1 | $857,371.0 | $863,233.0 | $5,862.0 |
| Infrastructure Assistance: Mexico Border | $10,628.2 | $9,932.0 | $0.0 | -$9,932.0 |
| Diesel Emissions Reduction Grant Program | $40,683.0 | $59,593.0 | $10,000.0 | -$49,593.0 |
| Targeted Airshed Grants | $19,818.1 | $29,796.0 | $0.0 | -$29,796.0 |
| GKM Water Monitoring | $105.5 | $3,973.0 | $0.0 | -$3,973.0 |
| Subtotal, State and Tribal Assistance Grants (STAG) | $2,504,819.6 | $2,444,407.0 | $2,332,120.0 | -$112,287.0 |
| Categorical Grants | | | | |
| Categorical Grant: Nonpoint Source (Sec. 319) | $169,771.6 | $169,754.0 | $0.0 | -$169,754.0 |
| Categorical Grant: Public Water System Supervision (PWSS) | $101,125.8 | $101,271.0 | $67,892.0 | -$33,379.0 |
| Categorical Grant: State and Local Air Quality Management | $214,180.6 | $226,669.0 | $151,961.0 | -$74,708.0 |
| Categorical Grant: Radon | $7,963.4 | $7,996.0 | $0.0 | -$7,996.0 |
| Categorical Grant: Pollution Control (Sec. 106) | | | | |
| *Monitoring Grants* | $18,392.0 | $17,727.0 | $11,884.0 | -$5,843.0 |
| *Categorical Grant: Pollution Control (Sec. 106) (other activities)* | $209,294.1 | $211,512.0 | $141,799.0 | -$69,713.0 |
| Subtotal, Categorical Grant: Pollution Control (Sec. 106) | $227,686.1 | $229,239.0 | $153,683.0 | -$75,556.0 |
| Categorical Grant: Wetlands Program Development | $15,867.0 | $14,561.0 | $9,762.0 | -$4,799.0 |
| Categorical Grant: Underground Injection Control (UIC) | $10,572.3 | $10,435.0 | $6,995.0 | -$3,440.0 |
| Categorical Grant: Pesticides Program Implementation | $12,402.4 | $12,615.0 | $8,457.0 | -$4,158.0 |
| Categorical Grant: Lead | $14,822.2 | $13,954.0 | $0.0 | -$13,954.0 |
| Categorical Grant: Hazardous Waste Financial Assistance | $97,165.0 | $99,016.0 | $66,381.0 | -$32,635.0 |
| Categorical Grant: Pesticides Enforcement | $17,687.1 | $17,927.0 | $10,531.0 | -$7,396.0 |
| Categorical Grant: Pollution Prevention | $4,504.6 | $4,733.0 | $0.0 | -$4,733.0 |

| | | | | |
|---|---|---|---|---|
| Categorical Grant: Toxics Substances Compliance | $4,938.3 | $4,886.0 | $3,276.0 | -$1,610.0 |
| Categorical Grant: Tribal General Assistance Program | $68,186.0 | $65,031.0 | $44,233.0 | -$20,798.0 |
| Categorical Grant: Underground Storage Tanks | $1,479.4 | $1,488.0 | $0.0 | -$1,488.0 |
| Categorical Grant: Tribal Air Quality Management | $14,027.8 | $12,742.0 | $8,963.0 | -$3,779.0 |
| Categorical Grant: Environmental Information | $9,289.3 | $9,580.0 | $6,422.0 | -$3,158.0 |
| Categorical Grant: Beaches Protection | $9,540.3 | $9,484.0 | $0.0 | -$9,484.0 |
| Categorical Grant: Brownfields | $46,994.9 | $47,421.0 | $31,791.0 | -$15,630.0 |
| Categorical Grant: Multipurpose Grants | $162.9 | $0.0 | $27,000.0 | $27,000.0 |
| Subtotal, Categorical Grants | $1,048,367.0 | $1,058,802.0 | $597,347.0 | -$461,455.0 |
| Congressional Priorities | | | | |
| Congressionally Mandated Projects | $4,565.8 | $0.0 | $0.0 | $0.0 |
| **TOTAL STAG** | **$3,557,752.4** | **$3,503,209.0** | **$2,929,467.0** | **-$573,742.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Categorical Grants

**Categorical Grant: Brownfields**
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$46,994.9*** | ***$47,421.0*** | ***$31,791.0*** | ***-$15,630.0*** |
| Total Budget Authority | $46,994.9 | $47,421.0 | $31,791.0 | -$15,630.0 |

**Program Project Description:**

EPA's Brownfields program is a successful model of the Agency working cooperatively with states, tribes, local governments, and other agencies to help communities oversee, plan, assess, and cleanup brownfield properties. State and Tribal Response programs address contaminated sites that do not require federal action but need assessment and/or cleanup before they can be considered ready for reuse. This program allocates funding to states and tribes to establish core capabilities and enhance their response programs.

Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[2] Since its inception, the Brownfields program has fostered a community-driven approach to the reuse of contaminated sites. As of the end of 2017, the State and Tribal Response programs have leveraged more than 8,280 jobs and $660 million in other funding. In FY 2017, EPA provided funding to 165 states, tribes, territories, and the District of Columbia.[3]

This funding is a critical source for state and tribal partners to establish and grow their Brownfields programs. Over 100 tribes have received Brownfields funding to build their programs, and cumulatively cleaned up over 570 properties and made over 7,520 acres ready for reuse. Addressing brownfields on tribal lands also has leveraged over 815 jobs and $85.4 million.[4] One recent example is with the Jamestown S'Klallam Tribe, located in Washington State. The tribe has used Brownfields funding to complete a site inventory, conduct assessment activities, and assisted in funding the cleanup of nearly 30 acres of critical salmon habitat which will help the tribe reclaim its treaty-protected fishing areas.

In Delaware, a 2016 study indicated that the state Brownfields program, in conjunction with EPA and other funding sources, has fully remediated 76 sites. The study also indicated that return of investment for Delaware for the 76 fully remediated properties was $16.48 leveraged per dollar

[2]1 U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY16; and (2) census data from the 20011-2015 American Community Survey.
[3] Data from U.S. EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES).
[4] Data from U.S. EPA ACRES.

invested and that those sites also added 255 jobs and added approximately $3.7 million to the tax coffers annually. [5]

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will allocate funding support to approximately 170 state and tribal response programs. Grant supported State and Tribal Response programs will oversee the cleanup at approximately 24,817 properties.

States and tribes may use categorical grant funding provided under this program in the following ways:

- Conducting site-specific activities, such as assessments and cleanups at brownfields sites;[6]
- Developing mechanisms and resources to provide meaningful opportunities for public participation;
- Developing mechanisms for approval of cleanup plans, and verification and certification that cleanup efforts are complete;
- Creating an inventory of brownfields sites;
- Developing a public record;
- Developing oversight and enforcement authorities, or other mechanisms and resources;
- Purchasing environmental insurance;
- Developing state and tribal tracking and management systems for land use, institutional and engineering controls; and
- Conducting public education and outreach efforts to ensure that tribal communities are informed and able to participate in environmental decision-making.

**Performance Measure Targets:**

Work under this program supports performance results in the Brownfields Projects program under the STAG appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$15,630.0) This program change reduces federal resources for cleanup oversight by states and tribes. EPA will work with states and tribes to prioritize funds to establish core capabilities, enhance their response programs, and identify program efficiencies.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Small Business Liability Relief and Brownfields Revitalization Act, § 128.

[5] Ratledge, Racca, Toth, and Borla 2016. "Economic Impact on Delaware's Economy: The Brownfield Program 2015" University of Delaware Center for Applied Demography & Survey Research.
[6] For more information, see Brownfields State & Local Tribal Information.

## Categorical Grant: Environmental Information

Program Area: Categorical Grants
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$9,289.3*** | ***$9,580.0*** | ***$6,422.0*** | ***-$3,158.0*** |
| Total Budget Authority | $9,289.3 | $9,580.0 | $6,422.0 | -$3,158.0 |

**Program Project Description:**

Funds provided under this categorical grant support the Environmental Information Exchange Network (EN) which is a critical component of the Agency's data strategy. The EN is a standards-based, secure approach for EPA and its state, tribal and territorial partners to exchange and share environmental data over the Internet. Through its use of technology and data standards, open-source software, shared services and reusable tools and applications, the EN, in tandem with the Agency's E-Enterprise efforts, offers its partners tremendous potential for managing, accessing, and analyzing environmental data more effectively and efficiently. As a part of E-Enterprise it is a priority to further enhance portal compatibility and shared services provided by the EN. This will lead to improved decision making and reduced regulatory burden by making data more accessible, eliminating redundant data collection, resolving issues with data validation, streamlining processes, and avoiding development and operational costs for redundant IT systems and components.

EN grants provide funding to states, territories, federally recognized Indian tribes, and tribal consortia to support their participation in the EN. These grants help EN partners acquire and develop the hardware and software needed to connect to the EN; use the EN to collect, report and access the data they need with greater efficiency; and integrate environmental data across programs. In collaboration with EPA, the Environmental Council of the States (ECOS) agreed upon the EN as the standard approach for EPA, state, tribe, and territorial data sharing. The grant program has provided the funding to make this approach a reality.

EPA plays a critical role in program planning, management, and evaluation for the Exchange Network. Specifically, EPA supports the Exchange Network and E-Enterprise governance which oversees strategic planning, administers the Network's grant program (approximately 155 grants), partners with tribes to expand tribal participation in the Exchange Network, and implements the Cross-Media Electronic Reporting Regulation (CROMERR). EPA also conducts return on investment analyses on specific electronic data exchange projects in partnership with programs and Regional Offices.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, the Environmental Information programs and activities will continue focus on state, local, and tribal partnerships in supporting government agencies' delivery of environmental protection. Under this strategy, the Agency will continue implementing its business processes and systems to reduce reporting burden on states and regulated facilities, and improve the effectiveness and efficiency of environmental protection programs for EPA, states, and tribes. EPA and states are making progress on implementing the E-Enterprise business strategy and will adjust schedules and prioritization to align with capacity. EPA anticipates awarding 15 EN grants in FY 2019 that will assist states, tribes, and territories to implement the following activities which will be prioritized based on core requirements:

- Data Access and Availability: These activities create services and tools that make state or tribal data available on demand to other partners. Providing data through web services and application programming interfaces (APIs) helps facilitate the sharing of information with the public, with private sector entities, and among state, tribal, and territorial agencies and EPA. The development of an API and web services approach, in collaboration with Exchange Network partners, advances the Network's goal of expanding access to environmental data and enhancing inter- and intra-partner data sharing. Emphasis will be placed on projects that develop web services, APIs, and tools that support access, analysis and integration of environmental data. Grant activities may include mobile and desktop applications, executive and program dashboards, and publishing environmental information to public sites.

- New EPA Reporting Data Flows: Grant projects will support developing and implementing new Exchange Network data flows that enable automated reporting to EPA systems (e.g., e-Permitting or NPDES).

- Partner Data Sharing: These activities support the partners' ability to share cross-state, cross-tribal or state-tribal data, such as institutional controls at contamination sites, data on cleanup sites, and datasets of national significance to tribes (e.g., open dumps).

- Virtual Exchange Services (VES) support for states, tribes, and territories: This program supports Exchange Network Partners transitioning from using individually-operated nodes to leveraging EPA-hosted VES. Moving to VES supports the transition to a cloud-based network infrastructure, which provides more cost-efficient ways for EN partners to manage nodes, thereby decreasing development and operational costs (including licensing, server, and administration costs). This new cloud-based model provides a simplified and standardized development environment, creates greater economies of scale, and reduces the administration burden on partners.

- Sharing CROMERR services and components: This supports state and tribal adoption and implementation of a suite of Central Data Exchange (CDX) services that EPA has centrally developed for CROMERR functions. Specific Shared Services include electronic signature for submissions from regulated entities, Copy of Record management, and identity

management within the registration process. States and tribes will use these services that are centrally hosted by EPA, replacing individually developed system functions. The use of shared services will reduce states and tribes' time to prepare and review applications and develop systems, and the cost to develop, operate, and maintain CROMERR-compliant e-reporting systems.

- Support for the EN program and E-Enterprise business strategy through a cooperative agreement with ECOS under the associated program support cost authority (Public Law 113-76). This includes direct support to both EN and E-Enterprise joint governance, each of which represents a cross-section of EPA, state, and tribal organizations. The cooperative agreement assists state, tribal, and territorial organizations in fulfilling the missions of both programs by providing programmatic, policy, technical, and administrative support; promoting information-sharing amongst state/tribal/territorial/federal partners; enhancing communication and outreach; and convening national user meetings.

The "National Environmental Information Exchange Network Grant Program Solicitation Notice" sets forth the process for awarding grant funding to states, tribes, and territories.[7] It is an annual guidance document that describes eligibility requirements, the process for application preparation and submission, evaluation criteria, award administration information, and post-award monitoring procedures.

**Performance Measure Targets:**

Work under this program supports performance results in the Exchange Network program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$3,158.0) This focuses funding for states and tribes to maintain existing tools, services and core capabilities while providing flexibility to address particular priorities.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Appropriation Acts: FY 2002 (Public Law 107-73), FY 2003 (Public Law 108-7), FY 2004 (Public Law 108-199), FY 2005 (Public Law 108-447), FY 2006 (Public Law 109-54), FY 2007 (Public Law 110-5), FY 2008 (Public Law 110-161), FY 2009 (Public Law 111-8), FY 2010 (Public Law 111-88), FY 2011 (Public Law 112-10), FY 2012 (Public Law 112-74), FY 2013 (Public Law 113-6), FY 2014 (Public Law 113-76), FY 2015 (Public Law 113-235), FY 2016 (Public Law 114-113); and FY 2017 (Public Law 115-31).

[7] Please see:https://www.epa.gov/exchangenetwork/exchange-network-grant-program.

## Categorical Grant: Hazardous Waste Financial Assistance

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$97,165.0*** | ***$99,016.0*** | ***$66,381.0*** | ***-$32,635.0*** |
| Total Budget Authority | $97,165.0 | $99,016.0 | $66,381.0 | -$32,635.0 |

### Program Project Description:

The Hazardous Waste Financial Assistance Grants help states[8] implement the Resource Conservation and Recovery Act (RCRA). Through RCRA, EPA and states protect human health and the environment by minimizing waste generation, preventing the release of millions of tons of hazardous wastes, and cleaning up land and water. Authorized states conduct the direct implementation of permitting, corrective action, and enforcement components of the RCRA hazardous waste management program.

This grant funding supports all 50 states and six territories. Currently, 48 states and two territories are authorized to implement the RCRA program. In addition, EPA directly implements the RCRA program in the states of Iowa and Alaska. To ensure statutory requirements are successful, EPA partners with state and local governments, as well as American businesses and non-governmental organizations, to significantly improve waste and material management practices.

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, the Agency (and authorized states) will:

- Issue and renew permits to a portion of the 6,600 hazardous waste treatment, storage and disposal facilities. This includes working with industry, the public, and states to address issues related to management of hazardous waste through development and application of standards, permits, guidance, and training;

- Process permit modifications to keep pace with evolving business practices, technology, market conditions, and cleanup decisions;

[8] When appropriate, these grants also are used to support tribes in conducting hazardous waste work in Indian Country. For additional information, refer to: https://www.epa.gov/tribal/solid-and-hazardous-waste-indian-country-resource-conservation-and-recovery-act-rcra.

- Update controls to encourage facilities to modernize technological systems, expand waste management capability, improve hazardous waste management practices, and make timely cleanup decisions;

- Inspect facilities to ensure compliance and safety;

- Oversee cleanups at hazardous waste management facilities, and focus on completing cleanup of the 3,779 priority 2020 Baseline facilities;

- Oversee cleanups at high priority contaminated hazardous waste management facilities and return cleaned up property to productive use. This includes working with state partners to ensure that responsible parties conduct effective and efficient cleanups that are protective of human health and the environment, and reduce the burden on federal taxpayers;

- Draft implementation documents such as permits and orders, review site assessment plans and results, review remedy selection documents, oversee remedy implementation, oversee public participation, and track progress of cleanups; and

- Continue to improve cleanup approaches, share best practices and cleanup innovations, such as RCRA FIRST,[9] and address issues of emerging science.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$32,635.0) This program change modifies timelines for reaching cleanup milestones and reviewing facility data, cleanup plans, and permit modifications. Assistance to tribal communities also is curtailed. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, § 3011.

[9] For more information, visit: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

**Categorical Grant: Pesticides Enforcement**
Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$17,687.1*** | ***$17,927.0*** | ***$10,531.0*** | ***-$7,396.0*** |
| Total Budget Authority | $17,687.1 | $17,927.0 | $10,531.0 | -$7,396.0 |

**Program Project Description:**

The Pesticides Compliance Monitoring and Enforcement Cooperative Agreement program supports pesticide product and user compliance with provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through cooperative agreements[10] with states and tribes.

The cooperative agreements support state and tribal compliance and enforcement activities under FIFRA. Enforcement and pesticides program cooperative agreement guidance is issued to focus regional, state, and tribal efforts on the highest priorities.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will prioritize and award state and tribal pesticides cooperative agreements for implementing the compliance monitoring and enforcement provisions of FIFRA within our resource levels.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands)**

- (-$7,396.0) This program change reflects EPA's efforts to work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities such as: providing compliance assistance to the regulated community and providing training for state and tribal inspectors.

[10] For additional information, refer to: http://www2.epa.gov/compliance/federal-insecticide-fungicide-and-rodenticide-act-state-and-tribal-assistance-grant.

**Statutory Authority:**

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

**Categorical Grant: Pesticides Program Implementation**

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$12,402.4*** | ***$12,615.0*** | ***$8,457.0*** | ***-$4,158.0*** |
| Total Budget Authority | $12,402.4 | $12,615.0 | $8,457.0 | -$4,158.0 |

**Program Project Description:**

The purpose of the pesticide program implementation grants is to translate pesticide regulatory decisions made at the national level into results at the local level. Under the pesticide statutes, responsibility for ensuring proper pesticide use is in large part delegated to states and tribes. Grant resources allow states and tribes to be more effective regulatory partners.

EPA's mission, as related to pesticides, is to protect human health and the environment from pesticide risk and to realize the value of pesticide availability by considering the economic, social, and environmental costs and benefits of the use of pesticides.[11] The agency provides grants to states, tribes and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, environmental groups, and other entities, as necessary, to assist in strengthening and implementing EPA's pesticide programs. This STAG program focuses on areas such as worker safety activities (including worker protection and certification and training of pesticide applicators), protection of endangered species,[12] protection of water resources from pesticides, protection of pollinators, and promotion of environmental stewardship and Integrated Pest Management related activities. These agency activities are achieved through implementation of EPA statutes and regulatory actions by states and tribes.

EPA supports implementation of tribal pesticide programs through grants. Tribal program outreach activities support tribal capacity to protect human health by reducing risks from pesticides in Indian country. This task is challenging given that certain aspects of Native Americans' lifestyles, such as subsistence fishing or consumption of plants that were not grown as food and possibly exposed to pesticides, may increase exposure to some chemicals or create unique chemical exposure scenarios. For additional information, please see http://www.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

[11] Federal Insecticide, Fungicide and Rodenticide Act, as amended. Section 3(a), Requirement of Registration (7 U.S.C. 136a). Available online at https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.
[12] The Endangered Species Act of 1973 sections 7(a)1 and 7 (a)2; Federal Agency Actions and Consultations, as amended (16 U.S.C. 1536(a)). Available at U.S. Fish and Wildlife Service, Endangered Species Act of 1973 internet site: http://www.fws.gov/endangered/laws-policies/section-7.html.

The agency also funds a multi-year grant in support of the State Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Issues Research and Evaluation Group, which ensures the close coordination of states and the EPA on pesticide issues.

**FY 2019 Activities and Performance Plan:**

Work in this program supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in EPA's FY 2018 – 2022 Strategic Plan.

*Worker Protection Standard and Certification and Training Program*

Through the Certification and Training Program and the Worker Protection Standard, EPA protects workers, pesticide applicators and handlers, employers, and the public from the potential risks posed by pesticides in their work environments. In FY 2019, EPA will continue to provide assistance and grants to implement the Certification and Training Program and Worker Protection Standard, and to address changes to the federal regulations for these programs. In FY 2019, states, territories and tribes will review and respond to the proposed changes to the Certification and Training regulations and begin to assess what changes to their certification programs may be needed when the changes to the Certification and Training rule are finalized. For worker protection, the states, territories and tribes also will train their program and inspection staff on the final revisions to the Worker Protection Standard, conduct outreach and training programs, and plan for inspections under the new rule.[13]

*Endangered Species Protection Program*

The Endangered Species Protection Program (ESPP) protects federally listed, threatened or endangered animals and plants whose populations are threatened by risks associated with pesticide use.[14] EPA complies with Endangered Species Act (ESA) requirements to ensure that its regulatory decisions will not likely jeopardize the continued existence of species listed as endangered and threatened, or destroy or adversely modify habitat designated as critical to those species' survival. EPA will provide grants to states and tribes, as described above, for projects supporting endangered species protection. Program implementation includes outreach, communication, education related to use limitations, review and distribution of endangered species protection bulletins, and mapping and development of endangered species protection plans. These activities support the Agency's mission to protect the environment from pesticide risk.

*Protection of Water Sources from Pesticide Exposure*

Protecting the nation's water sources from possible pesticide contamination is another component of EPA's environmental protection efforts. EPA provides funding, through cooperative agreements, to states, tribes, and other partners to investigate and respond to water resource contamination by pesticides. Stakeholders and partners, including states and tribes, are expected to evaluate local pesticide uses that have the potential to contaminate water resources and take

[13] See http://www.epa.gov/pesticide-worker-safety/how-epa-protects-workers-pesticide-risk for more information.
[14] http://www.epa.gov/oppfead1/endanger/species-info.htm.

steps to prevent or reduce contamination where pesticide concentrations approach or exceed levels of concern.

*Integrated Pest Management*

Within available resources, EPA will continue to support risk reduction by providing assistance to promote the use of safer alternatives to traditional chemical pest control methods including Integrated Pest Management (IPM) techniques.[15] EPA supports the development and evaluation of new pest management technologies that contribute to reducing both health and environmental risks from pesticide use.

*Pollinator Health*

EPA will continue to work with state and tribal agencies to promote the development of locally-based plans to help improve pollinator health. State pollinator protection plans in place in several states have been an effective communication and collaboration mechanism between stakeholders at the local level that can lead to reduced pesticide exposure and protection of honey bees, while maintaining the flexibility needed by growers. EPA believes that these plans, developed through a robust stakeholder engagement process at the local level, serve as good models for enhanced local communication and also can help accomplish EPA's overall goal of mitigating exposure of bees to acutely toxic pesticides.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$4,158.0) This program change will streamline core activities, find efficiencies, and leverage available resources. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

**Statutory Authority:**

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetic Act (FFDCA); Food Quality Protection Act (FQPA) of 1996; Endangered Species Act (ESA).

[15] For additional information, see http://www.epa.gov/pesp/.

**Categorical Grant: Pollution Control (Sec. 106)**

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$227,686.1*** | ***$229,239.0*** | ***$153,683.0*** | ***-$75,556.0*** |
| Total Budget Authority | $227,686.1 | $229,239.0 | $153,683.0 | -$75,556.0 |

## Program Project Description:

Section 106 of the Clean Water Act authorizes EPA to provide federal assistance to states (including territories and the District of Columbia), tribes qualified under Clean Water Act Section 518(e), and interstate agencies to establish and maintain adequate programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources. Prevention and control activities supported through these grants include providing National Pollutant Discharge Elimination System (NPDES) permits, conducting ambient water quality monitoring and assessment, listing impaired waters, developing water quality standards and Total Maximum Daily Loads (TMDLs), surveillance, and enforcement.

## FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. The Section 106 Grant Program supports prevention and control measures that improve water quality. In FY 2019, EPA will focus on core statutory requirements while continuing to provide states and tribes with flexibility to best address their particular priorities.

Monitoring and Assessment:
EPA is working with states to provide monitoring and assessment information to support multiple Clean Water Act programs in a cost-efficient and effective manner. The goal is to have scientifically defensible monitoring data that is needed to address priority problems at state, national, and local levels and to track national water quality improvements over time.

In FY 2019, EPA will continue working with states and tribes to support their water quality monitoring programs. Monitoring Initiative funds for states and tribes will support the National Aquatic Resource Surveys (NARS) and the enhancement of state and tribal monitoring programs. In FY 2019, the Monitoring Initiative will be funded at $11.9 million, with $5.5 million allocated for participation in the NARS and $6.4 million for monitoring program priority enhancements. Through the Monitoring and Assessment Partnership, EPA will work with states to develop and apply innovative and efficient monitoring tools and techniques to optimize availability of high-quality data to support priority Clean Water Act program needs.

Review and Update Water Quality Standards:
States and authorized tribes will review and update their water quality standards as required by the Clean Water Act and EPA regulation at 40 CFR part 131. The regulations place a focus on states and tribes keeping water quality criteria in their standards up to date to reflect the latest science. EPA will work with tribes that want to establish water quality standards.

Develop Total Maximum Daily Loads:
EPA will work with states and other partners to develop and implement TMDLs for Clean Water Act 303(d) listed impaired waterbodies as a tool for meeting water quality restoration goals. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented via permit requirements and through local, state, and federal watershed plans and programs to restore waters. EPA will work with states to facilitate accurate, comprehensive, and geo-referenced water quality assessment decisions made available to the public via the Assessment Total Maximum Daily Load Tracking and Implementation System (e.g., ATTAINS). In addition, EPA and states will implement a performance measure that looks more comprehensively at the 303(d) program by measuring the extent of state priorities addressed by TMDLs, alternative restoration plans, or protection plans.

Issue Permits:
The NPDES program requires point source dischargers to be permitted and pretreatment programs to control discharges from industrial and other facilities to the nation's wastewater treatment plants. EPA will work with states to balance competing priorities, identify opportunities to enhance the integrity and effectiveness of NPDES permits, set schedules to address significant action items, and map out program revisions.

Conducting Compliance Monitoring and Enforcement:
EPA will work with NPDES-authorized states to implement the 2014 Clean Water Act NPDES Compliance Monitoring Strategy (CMS).[16] The NPDES CMS establishes national goals for allocation of inspection resources across all NPDES regulated entities in order to best protect water quality.

EPA works with states on advanced technologies such as remote water monitoring sensors to collect discharge data, to more efficiently identify problem areas. The Agency expects that these technologies will improve EPA's and state's analytical capabilities and enhance the public's knowledge about the quality of their environment.

Currently, EPA and states are implementing the NPDES Electronic Reporting Rule through the Integrated Compliance Information System.[17] Phase 1 of the rule was implemented in FY 2017 for NPDES Discharge Monitoring Reports, and Phase 2 will begin cooperatively with our state partners in FY 2018. In FY 2019, EPA also will work with additional states in the development of electronic reporting tools. For example, approximately 20 states currently use EPA's electronic

[16] For more information, refer to: https://www.epa.gov/compliance/clean-water-act-national-pollutant-discharge-elimination-system-compliance-monitoring.
[17] For more information, refer to: https://www.epa.gov/compliance/npdes-ereporting.

reporting tool to collect DMRs. This saves the states a significant amount of resources in development, and operations and maintenance costs.

Working with Tribal Water Pollution Control Programs:
In FY 2019, EPA will work with tribal programs on activities that address water quality and pollution problems on tribal lands. Tribes will implement the *Clean Water Act Section 106 Tribal Guidance*, which forms a framework for tribes to establish, implement, and expand their Water Pollution Control Programs.

**Performance Measure Targets:**

| **(TMDL-01) Square miles associated with state priority waters addressed by a TMDL, other restoration plan, or protection approach.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 35,000 | 50,000 |

| **(NPDES-01) Percentage of high-priority state NPDES permits that are issued in the fiscal year.** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 80 | 80 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$75,556.0) This program change reduces the Section 106 grants. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

**Statutory Authority:**

Clean Water Act, § 106.

## Categorical Grant: Public Water System Supervision (PWSS)

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$101,125.8*** | ***$101,271.0*** | ***$67,892.0*** | ***-$33,379.0*** |
| Total Budget Authority | $101,125.8 | $101,271.0 | $67,892.0 | -$33,379.0 |

### Program Project Description:

The Public Water System Supervision (PWSS) program provides grants to states and tribes with primary enforcement authority (primacy) to implement and enforce the National Primary Drinking Water Regulations under the Safe Drinking Water Act. These grants support the safety of the nation's drinking water resources. The states and some tribes are the primary implementers of the national drinking water program and work with the public water systems within their jurisdiction to protect public health by achieving and maintaining compliance with drinking water rules.

The National Primary Drinking Water Regulations set forth health-based standards, monitoring, reporting and recordkeeping, sanitary survey, compliance tracking, and enforcement elements to ensure that the nation's drinking water supplies do not pose adverse health risks. The PWSS program supports the states' role in a federal/state partnership to ensure safe drinking water supplies to the public. States use these grant funds to fund drinking water program personnel who:

- Provide technical assistance to owners and operators of public water systems;
- Conduct sanitary surveys (i.e., on-sight reviews conducted to determine and support a facility's capacity to deliver safe drinking water) and other site visits;
- Respond to questions from the public;
- Train and certify public water system operators;
- Manage public water system data, facilitate electronic reporting of compliance monitoring data, and submit that data into the Safe Drinking Water Information System (SDWIS);
- Share sampling results with the public;
- Respond to violations;
- Certify laboratories;
- Conduct laboratory analyses; and
- Provide training and technical assistance to small system staff and management to build water system technical, managerial, and financial capacity.

Some states and tribes do not have primary enforcement authority. Funds allocated to the State of Wyoming, the District of Columbia, and Indian tribes without primacy are used to support direct implementation activities by EPA or for developmental grants to Indian tribes to develop capacity for primacy.[18]

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will work with states and tribes to target funds to core statutory requirements while providing states and tribes with flexibility to best address their particular priorities. In FY 2019, EPA will provide funds to support state and tribal efforts to assist the most vulnerable water systems in meeting existing drinking water regulations and in working to develop financial and managerial capacity needed to protect federal investments that remedy aging or inadequate infrastructure (e.g., pipe replacement to prevent failures in distribution systems, installation of treatment to remove harmful drinking water contaminants). EPA will encourage states to use grant funds to focus, to the extent possible, on the most immediate challenges public water systems are facing today.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$33,379.0) This program change reflects a reduction in the PWSS grants. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

**Statutory Authority:**

Safe Drinking Water Act, § 1443.

[18] For more information, see: http://www.epa.gov/dwreginfo/public-water-system-supervision-pwss-grant-program https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=cca066b833c552bdf3c9ff011e576c7f.

**Categorical Grant: State and Local Air Quality Management**

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$214,180.6*** | ***$226,669.0*** | ***$151,961.0*** | ***-$74,708.0*** |
| Total Budget Authority | $214,180.6 | $226,669.0 | $151,961.0 | -$74,708.0 |

**Program Project Description:**

This program provides funding for state air programs, as implemented by multi-state, state, and local air pollution control agencies. Section 103 of the Clean Air Act (CAA) provides EPA with the authority to award grants to a variety of agencies, institutions, and organizations, including the air pollution control agencies funded from the STAG appropriation, to conduct and promote certain types of research, investigations, experiments, demonstrations, surveys, studies, and training related to air pollution. Section 105 of the CAA provides EPA with the authority to award grants to state and local air pollution control agencies to develop and implement continuing environmental programs for the prevention and control of air pollution, for the implementation of National Ambient Air Quality Standards (NAAQS) set to protect public health and the environment, and for improving visibility in our national parks and wilderness areas (Class I areas). The continuing activities funded under Section 105 include development and implementation of emission reduction measures, development and operation of air quality monitoring networks, and a number of other air program activities. Section 106 of the CAA provides EPA with the authority to fund interstate air pollution transport commissions to develop or carry out plans for designated air quality control regions.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, states will continue to be responsible for State Implementation Plans (SIPs), which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility obligations. There are several events that trigger SIP obligations. For example, when EPA promulgates a new or revises an existing NAAQS, affected states must update certain parts of their SIPs within three years. In addition, whenever EPA completes a designation or reclassification of an area as nonattainment for a particular pollutant, an affected state must update their SIP within three years or 18 months, depending on the pollutant. In FY 2019, EPA anticipates state submission of infrastructure SIPs for the ozone standards that were revised in 2015. Also, affected states will be completing development or revision of attainment SIPs for areas designated nonattainment or reclassified to "Serious" for the 2006 and/or 2012 fine particle ($PM_{2.5}$) NAAQS; areas reclassified to "Serious" for the 2008 ozone NAAQS; and areas designated nonattainment for the 2010 sulfur dioxide ($SO_2$)

NAAQS. States also have SIP obligations associated with visibility requirements, among other requirements identified in the CAA.

States will continue implementing the 2008 8-hour ozone NAAQS, the 2008 lead NAAQS, the 2010 1-hour nitrogen dioxide ($NO_2$) NAAQS, and the 2010 1-hour $SO_2$ NAAQS. As appropriate, states also will continue implementing the previous $PM_{2.5}$ and ozone NAAQS, including the 1997 annual and 24-hour $PM_{2.5}$ NAAQS, the 2006 24-hour $PM_{2.5}$ NAAQS, the 2012 annual $PM_{2.5}$ NAAQS, and the 1-hour and 1997 8-hour ozone NAAQS (through anti-backsliding requirements). SIP preparation for some pollutants is complicated due to the regional nature of air pollution that requires additional and more detailed modeling, refined emissions inventories, and greater stakeholder involvement. In FY 2019, EPA will work with states to prioritize activities needed to meet obligations for SIP development and in implementing their plans for the NAAQS and regional haze, adjusting schedules, and identifying streamlining options.

States will continue to operate and maintain their monitoring networks to the extent possible, balancing competing priorities. This is typically the largest part of a state's air program, supporting the quality and availability of data that states are required to submit. In 2015, EPA finalized its review of the ozone NAAQS monitoring requirements, and extended the ozone monitoring season in 33 states and revised monitoring requirements for the Photochemical Assessment Monitoring Stations (PAMS). Revised PAMS monitoring requirements are applicable at National Core (NCore) network sites in Core-Based Statistical Areas (CBSAs) of 1 million population or more, or at alternative locations approved by the regional offices. These sites are required to be operational by June 2019. For purposes of implementing the 2010 1-hour $SO_2$ NAAQS, states will continue operating new monitoring networks in accordance with the requirements of the $SO_2$ NAAQS Data Requirements Rule in certain locations in FY 2019.

The multi-pollutant monitoring site network (NCore) serves multiple objectives such as measuring long-term trends of air pollution, validating models, and providing input to health and atmospheric science studies. EPA will provide assistance to states to operate this network of approximately 80 stations across the nation that provide measurements for particles, including filter-based and continuous mass for $PM_{2.5}$; chemical speciation for $PM_{2.5}$; and $PM_{10}$ - $PM_{2.5}$ mass. Stations also measure gases such as carbon monoxide (CO), $SO_2$, $NO_2$, and ozone, and record basic meteorology. In FY 2019, EPA will continue to work with states to support the operation of monitoring sites in the near-road environment – a source of concentrated mobile source emissions. Data collected from these monitoring sites implemented under phases 1 and 2 of the near-road monitoring network requirements will be used to assess compliance with the NAAQS, support public information based on the Air Quality Index (AQI), and support short- and long-term studies of health impacts of near-road exposure.

In FY 2019, states with approved or delegated permitting programs will continue to implement permitting requirements as part of their programs. EPA will continue to undertake actions, as necessary, as a result of the Supreme Court's 2014 decision on EPA's Tailoring Rule as well as the April 2015 D.C. Circuit Amended Judgment implementing the Supreme Court decision.

The development of a complete emission inventory is an important step in an air quality management process. Emission inventories are used to help determine significant sources of air

pollutants and establish emission trends over time, target regulatory actions, and estimate air quality through dispersion and photo-chemical modeling. An emission inventory includes estimates of the emissions from various pollution sources in a specific geographical area. In FY 2019, states will continue to develop inventories and submit data to EPA under an adjusted schedule for the next release of the National Emission Inventory (NEI). EPA plans to release the 2017 NEI in calendar year 2020.

This program supports state and local agency capabilities to provide air quality forecasts for ozone and $PM_{2.5}$ that provide the public with information they can use to make daily lifestyle decisions to protect their health. This information allows people to take precautionary measures to avoid or limit their exposure to unhealthy levels of air quality. In addition, many communities use forecasts for initiating air quality "action" or "awareness" days, which seek voluntary participation from the public to reduce pollution and improve local air quality. Data will be updated on an adjusted schedule to allow for state and local agencies to provide important public health information to the public.

This program also supports state and local efforts to characterize air toxics problems and take measures to reduce health risks from air toxics, most often through implementation of EPA regulations. For example, this funding supports enforcement of new and revised New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards for major sources (and area sources) by delegated air agencies. This funding also supports characterization work that includes collection and analysis of emissions data and monitoring of ambient air toxics. In FY 2019, funds also will support the National Air Toxics Trends Stations (NATTS), consisting of 27 air toxics monitoring sites operated and maintained by state and local air pollution control agencies across the country, including the associated quality assurance, data analysis, and methods support. States will balance the requirements of the different components of their monitoring enterprise in FY 2019.

Under the visibility requirements of the CAA, in FY 2019 states will complete any remaining first planning period obligations for regional haze, and work collaboratively to support SIP submissions associated with the second planning period. In addition, states will be implementing control measures required from their first planning period SIPs. Remaining first planning period obligations include submittal of progress report SIP revisions to ensure that states are making progress toward their visibility improvement goals. Comprehensive regional haze SIP revisions are due in FY 2021.

EPA also proposes to transition the funding of the $PM_{2.5}$ monitoring network from Section 103 authority of the CAA, which provides 100 percent federal funding, to Section 105 authority of the CAA, which provides a maximum federal share of 60 percent.

**Performance Measure Targets:**

Work under this program supports performance results in the Federal Support for Air Quality Management program under the EPM appropriation.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$74,708.0) This program change is a reduction to environmental state programs responsible for carrying out air quality implementation activities. EPA will work with states to target funds to core requirements while providing flexibility to address particular state priorities. A major component of this program is air monitoring, which is used for providing information to the public, states, and researchers; and states will refocus resources to incorporate any new recommendations as a result of updated NAAQS monitoring guidance.

**Statutory Authority:**

Clean Air Act, §§ 103, 105, 106.

## Categorical Grant: Toxics Substances Compliance

Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$4,938.3*** | ***$4,886.0*** | ***$3,276.0*** | ***-$1,610.0*** |
| Total Budget Authority | $4,938.3 | $4,886.0 | $3,276.0 | -$1,610.0 |

### Program Project Description:

The Toxic Substances Control Act (TSCA) program builds environmental partnerships[19] with states and tribes to strengthen their ability to address environmental and public health threats from toxic substances. This state and tribal assistance grant is used to prevent or eliminate unreasonable risks to health or the environment and to ensure compliance with toxic substance regulations. The grants support inspection programs associated with the Asbestos Hazard Emergency Response Act, lead-based paint (§402(a), §406(b), and the Renovation, Repair and Painting rule), and Polychlorinated biphenyls (PCBs).

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhanced Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to award state and tribal assistance grants to assist in the implementation of compliance and enforcement provisions of TSCA.

Over the past two years, the Agency has consulted with its state partners in the development of a new allocation formula for the TSCA State and Tribal Assistance Grants. EPA proposes implementing the new formula in FY 2019, using a phased approach over three years (FY 2019-FY 2021). This approach establishes a weighted formula that emphasizes lead-based paint, maximizing environmental benefits and program performance. The new formula better aligns the distribution of funding with the national program priorities including reducing risks from 1) lead poisoning or elevated blood-lead levels, 2) exposure to asbestos, and 3) exposure to PCBs.

### Performance Measure Targets:

Currently there are no performance measures specific to this program.

[19] For additional information, refer to: https://www.epa.gov/compliance/toxic-substances-compliance-monitoring-grant-guidance-fiscal-year-2018.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,610.0) This program change reflects EPA's planned work with states and tribes to target funds to core requirements and priorities, such as reducing risks from lead-based paint, while providing flexibility to address particular state and tribal priorities.

**Statutory Authority:**

Toxic Substances Control Act.

## Categorical Grant: Tribal Air Quality Management

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$14,027.8*** | ***$12,742.0*** | ***$8,963.0*** | ***-$3,779.0*** |
| Total Budget Authority | $14,027.8 | $12,742.0 | $8,963.0 | -$3,779.0 |

**Program Project Description:**

This program includes funding for tribal air pollution control agencies and/or tribes. Through Clean Air Act (CAA) Section 105 grants, tribes may develop and implement programs for the prevention and control of air pollution and implementation of national primary and secondary National Ambient Air Quality Standards (NAAQS). Through CAA Section 103 grants, tribal air pollution control agencies or tribes, colleges, universities, and multi-tribe jurisdictional air pollution control agencies may conduct and promote research, investigations, experiments, demonstrations, surveys, studies, and training related to ambient or indoor air pollution in Indian Country.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. Tribes will assess environmental and public health conditions in Indian Country by developing emission inventories and, where appropriate, siting and operating air quality monitors. Tribes will continue to develop and implement air pollution control programs for Indian Country to prevent; and address air quality concerns. EPA will continue to fund organizations for the purpose of providing technical support, tools, and training for tribes to build capacity to develop and implement programs at reduced levels. A key activity is to work to reduce the number of days in violation of the NAAQS. This program supports the Agency's priority of building strong partnerships with individual tribes and with the National Tribal Air Association (NTAA), whose priorities include tribes' ability to collect and provide monitoring data and to protect the health of their tribal members.

In FY 2019, EPA will continue to implement the Tribal New Source Review rule, under which tribes may opt to take an active role in implementation by developing a Tribal Implementation Plan, managing the program under EPA's authority, or by actively participating in the permit review and outreach process.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$3,779.0) This program change is a reduction in federal support for CAA grants to tribal air pollution control agencies and/or tribes. The EPA will work with tribes to target funds to core requirements, while providing flexibility to best address tribal priorities.

**Statutory Authority:**

Clean Air Act, §§ 103, 105.

**Categorical Grant: Tribal General Assistance Program**

Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$68,186.0*** | ***$65,031.0*** | ***$44,233.0*** | ***-$20,798.0*** |
| Total Budget Authority | $68,186.0 | $65,031.0 | $44,233.0 | -$20,798.0 |

**Program Project Description:**

In 1992, Congress established the Indian Environmental General Assistance Program (GAP) which provides grants and technical assistance to tribes to cover the costs of planning, developing, and establishing tribal environmental protection programs consistent with other applicable provisions of law administered by EPA. EPA works collaboratively with tribal partners on mutually identified envrionmental and health priorities to achieve these aims. Funding provided under GAP is for the administrative, technical, legal, enforcement, communication, and outreach capacities tribes need to effectively administer environmental regulatory programs that EPA may delegate to tribes. Please see http://www.epa.gov/aieo/gap.htm for more information.

Some uses of GAP funds include:

- Assessing the status of a tribe's environmental conditions;
- Developing appropriate environmental programs, codes and ordinances;
- Developing the capacity to administer environmental regulatory programs that EPA may delegate to a tribe;
- Conducting public education and outreach efforts to ensure that tribal communities (including non-members residing in Indian country) are informed and able to participate in environmental decision-making;
- Promoting communication and coordination among federal, state, local, and tribal environmental officials; and
- Promoting effective consultation activities on environmental actions and issues.

GAP supports tribal capacity development through financial assistance to approximately 520 tribal governments and inter-tribal consortia. GAP has helped tribes receive 110 program delegations to administer a variety of programs across a number of statutes, including the Clean Water Act, Safe Drinking Water Act, and the Clean Air Act. Tribes also have developed their capacity to assist EPA in implementing federal environmental programs in the absence of an EPA-approved tribal program through Direct Implementation Tribal Cooperative Agreements (DITCAs). In FY 2017 there were 19 active DITCAs supporting EPA's direct implementation activities. Similarly, EPA also has been able to certify 32 tribal employees as inspectors for various federal compliance

programs. GAP also supports tribes with the development of their waste management programs with over 220 tribes having Integrated Waste Management Plans.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, GAP grants will continue to assist tribal governments in developing environmental protection program capacity to assess environmental conditions, use relevant environmental information to improve long-range strategic environmental program development planning, and develop environmental programs tailored to tribal needs consistent with those long-range strategic plans.

The Agency's "*Guidance on the Award and Management of General Assistance Agreements for Tribes and Inter-Tribal Consortia*"[20] establishes an overall framework for tribes and EPA to follow in developing tribal environmental program capacity under GAP. Specifically, the guidance strengthens joint strategic planning through development and implementation of EPA-Tribal Environmental Plans (ETEPs) to document long-range tribal environmental program development priorities. These strategic planning documents inform funding decisions by linking ETEP goals to annual GAP assistance agreement work plans and provide a mechanism to measure tribal progress in meeting their program development goals. In FY 2019, EPA will continue to implement GAP under this national framework, as modified during FY 2018, and maintain an emphasis on training (internal and external) to support nationally consistent GAP guidance interpretation and implementation. In supporting a strong GAP management framework (as referenced under Tribal Capacity Program [EPM Appropriation]), EPA will continue a process to establish a performance information management system to track the progress tribes achieve for developing and implementing environmental protection programs in Indian Country.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$20,798.0) This program change reduces funding for tribes to develop the capacity to implement environmental protection programs in Indian country. EPA will work with tribes to target funds to core requirements while providing flexibility to address particular priorities expressed in the ETEPs.

**Statutory Authority:**

Indian Environmental General Assistance Program Act.

[20] http://www.epa.gov/tp/GAP-guidance-final.pdf.

## Categorical Grant: Underground Injection Control (UIC)

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$10,572.3*** | ***$10,435.0*** | ***$6,995.0*** | ***-$3,440.0*** |
| Total Budget Authority | $10,572.3 | $10,435.0 | $6,995.0 | -$3,440.0 |

### Program Project Description:

EPA's Underground Injection Control (UIC) grant program funds are allocated to federal, state, and tribal government agencies that oversee underground injection activities to prevent contamination of underground sources of drinking water from fluid injection, as established by the Safe Drinking Water Act.

EPA regulates the construction, operation, permitting, and closure of injection wells used to place fluids underground for storage or disposal. In FY 2019, EPA will provide financial assistance in the form of grants to states and tribes that have primary enforcement authority (primacy) to implement and manage UIC programs and ensure safe injection well operations that prevent contamination of underground source of drinking water. Eligible Indian tribes that demonstrate an intent to achieve primacy also may receive grants for the initial development of UIC programs and be designated for "Treatment as a State" if their programs are approved. Where a jurisdiction does not have primacy, EPA uses these funds for direct implementation of federal UIC requirements.

### FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. The UIC program manages more than 700,000 injection wells[21] across six well types to protect our groundwater resources. The requested funding supports implementation of the UIC program. EPA directly implements UIC programs in eight states and two territories and shares responsibility in seven states and two tribes. EPA also administers the UIC programs for all other tribes and for Class VI wells in all states.[22] EPA will continue its support of state oil and gas programs as they implement the UIC Class II program or assume responsibility for Class II programs.

[21] As represented in calendar year 2015 annual inventory.
[22] For more information, please visit:
https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=c1307f57fe8bec34f1a65660eff495a8&cck=1&au=&ck=
http://water.epa.gov/type/groundwater/uic/index.cfm.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$3,440.0) This program change is a reduction in the UIC grants. EPA will work with states and tribes to target funds to core statutory requirements while providing flexibility to address particular priorities.

**Statutory Authority:**

Safe Drinking Water Act, § 1443.

## Categorical Grant: Wetlands Program Development

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$15,867.0*** | ***$14,561.0*** | ***$9,762.0*** | ***-$4,799.0*** |
| Total Budget Authority | $15,867.0 | $14,561.0 | $9,762.0 | -$4,799.0 |

**Program Project Description:**

The Wetland Program Development Grants (WPDGs) assist states, tribes, and local governments to build or enhance their wetland protection and restoration programs. The program's grants are used to develop new or refine existing state and tribal wetland programs in one or more of the following areas: (1) monitoring and assessment; (2) voluntary restoration and protection; (3) regulatory programs, including Section 401 certification and Section 404 assumption;[23] and (4) wetland water quality standards.

States and tribes develop program elements based on their goals and resources. The grants support development of state and tribal wetland programs that further the goals of the Clean Water Act and improve water quality in watersheds throughout the country. The grants are awarded on a competitive basis under the authority of Section 104(b)(3) of the Clean Water Act. The grant funding is split among EPA's 10 regions according to the number of states and territories per region. Each region is required, by regulation, to compete the award of these funds to states, tribes, local governments, interstate agencies, and inter-tribal consortia.[24] In addition, EPA sets aside 10 percent of the appropriation for a grant competition specifically for tribes and inter-tribal consortia.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. EPA will continue to assist states and tribes in strengthening wetland protection through documenting stresses or improvements to wetland condition, providing tools for wetland restoration and protection, and developing regulatory controls to avoid, minimize, and compensate for wetland impacts.

[23] State and Tribal assumption of Section 404 is an approach that can be useful in streamlining 404 permitting in coordination with other environmental and land use planning regulations. When states or tribes assume administration of the federal regulatory program, Section 404 permit applicants seek permits from the state or tribe rather than the federal government. States and tribes are in many cases located closer to the proposed activities and are often more familiar with local resources, issues, and needs. Even when a state assumes permitting under Section 404, the Corps of Engineers retains jurisdiction for a certain portion of waters under the CWA as well as those waters subject to Section 10 of the River and Harbors Act for permits.

[24] For more information, see http://water.epa.gov/grants_funding/wetlands/estp.cfm.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$4,799.0) This program change reduces the Wetland Program Development grants. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

**Statutory Authority:**

Clean Water Act, § 104(b)(3).

**Categorical Grant: Beaches Protection**

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$9,540.3*** | ***$9,484.0*** | ***$0.0*** | ***-$9,484.0*** |
| Total Budget Authority | $9,540.3 | $9,484.0 | $0.0 | -$9,484.0 |

**Program Project Description:**

EPA's Beaches Protection program awards grants to eligible coastal states, territories, and tribes to monitor water quality at beaches and to notify the public, through beach advisories and closures, when water quality exceeds applicable standards.

**FY 2019 Activities and Performance Plan:**

Resources have been eliminated for this program in FY 2019. EPA will encourage states to continue beach monitoring and notification programs.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$9,484.0) This program change eliminates the Beaches Protection grant program, which is a mature, well-established program supporting state beach monitoring and notification programs that can continue to be implemented at the local level.

**Statutory Authority:**

Clean Water Act; Beach Act of 2000.

**Categorical Grant: Lead**
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$14,822.2*** | ***$13,954.0*** | ***$0.0*** | ***-$13,954.0*** |
| Total Budget Authority | $14,822.2 | $13,954.0 | $0.0 | -$13,954.0 |

**Program Project Description:**

EPA's Lead Paint Program is working to reduce the number of children with blood lead levels of five micrograms per deciliter or higher. The Lead program also works to reduce the disparities in blood lead levels between low-income children and non-low-income children.[25] The Lead Categorical Grant Program provides support to authorized states and tribal programs that administer training and certification programs for lead professionals and contractors.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. Lead paint certification will continue under the Chemical Risk Review Reduction program.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$13,954.0) This program change eliminates the Categorical Grant: Lead program.

**Statutory Authority:**

Toxic Substances Control Act (TSCA), §§ 401-412.

[25] Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (September, 2012). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. http://www.cdc.gov/exposurereport/.

## Categorical Grant: Multipurpose Grants

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Multiple

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$162.9*** | ***$0.0*** | ***$27,000.0*** | ***$27,000.0*** |
| Total Budget Authority | $162.9 | $0.0 | $27,000.0 | $27,000.0 |

**Program Project Description:**

EPA and its partners have made enormous progress in protecting air, water, and land resources. The newly-proposed Multipurpose Grants program will differ from prior iterations by supporting states, tribes, and territories in the implementation of mandatory statutory duties in environmental programs delegated by EPA. Recognizing that environmental challenges differ due to variations in geography, population density, and other factors, this program provides EPA's partners with flexibility to target funds to their highest priority efforts to protect human health and the environment.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports multiple objectives under Goal 1, Core Mission in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, these funds will support the implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws. States, tribes, and territories will have the flexibility to apply the funds toward activities required in a broad array of environmental statutes, depending on local needs and priorities. Results will be tracked as required by the Environmental Results Order and could support critical work across multiple environmental programs.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$27,000.0) Funding will enable states and tribes to target resources toward critical needs in implementation of mandatory statutory programs.

**Statutory Authority:**

Annual Appropriation Acts; GAP; PPA; FIFRA; CAA; TSCA; NEPA; CWA; SDWA; RCRA; CERCLA; NAFIA; OAPCA; MPRSA; CRCA; Indoor Radon Abatement Act.

Note: EPA is currently seeking appropriations language to support this program: "Provided further; That of the funds otherwise available under the heading State and Tribal Assistance Grants; $27,000,000 shall be for multi-purpose grants for the implementation of mandatory statutory duties in delegated environmental programs."

## Categorical Grant: Nonpoint Source (Sec. 319)

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$169,771.6*** | ***$169,754.0*** | ***$0.0*** | ***-$169,754.0*** |
| Total Budget Authority | $169,771.6 | $169,754.0 | $0.0 | -$169,754.0 |

**Program Project Description:**

Section 319 of the Clean Water Act (CWA) authorizes states, territories, and tribes to use a range of tools to implement their Nonpoint Source Programs.[26] Grants under Section 319 are provided to states, territories, and tribes to help them implement their EPA approved Nonpoint Source Management Programs.

**FY 2019 Activities and Performance Plan:**

Resources for this program have been eliminated in FY 2019. The Agency will continue to coordinate with the United States Department of Agriculture (USDA) on targeting funding where appropriate to address nonpoint sources.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$169,754.0) This program change eliminates the Nonpoint Source grant program. There are other sources of funding that support this type of work across government and the Agency will partner with USDA to target their efforts.

**Statutory Authority:**

Clean Water Act, § 319.

[26] For more information, see: https://www.cfda.gov.

## Categorical Grant: Pollution Prevention

Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$4,504.6*** | ***$4,733.0*** | ***$0.0*** | ***-$4,733.0*** |
| Total Budget Authority | $4,504.6 | $4,733.0 | $0.0 | -$4,733.0 |

**Program Project Description:**

The Pollution Prevention (P2) Categorical Grants program augments the counterpart P2 program under the Environmental Program and Management (EPM) account.

**FY 2019 Activities and Performance Plan:**

Resources and FTE have been eliminated for this program in FY 2019. Based on previous investments in P2 solutions made under this program project, partners are expected to be able to continue to share best practices and pursue additional pollution prevention solutions.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$4,733.0) This program change eliminates the Categorical Grant Pollution Prevention program in FY 2019.

**Statutory Authority:**

Pollution Prevention Act of 1990; Toxic Substances Control Act.

**Categorical Grant: Radon**
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$7,963.4*** | ***$7,996.0*** | ***$0.0*** | ***-$7,996.0*** |
| Total Budget Authority | $7,963.4 | $7,996.0 | $0.0 | -$7,996.0 |

**Program Project Description:**

EPA's non-regulatory radon program promotes public action to reduce the health risk from indoor radon. EPA has assisted states and tribes through technical support and the State Indoor Radon Grants (SIRG) program, which provided categorical grants to develop, implement, and enhance programs that assess and mitigate radon risk. For over 30 years, EPA's radon program has provided important guidance and significant funding to help states establish their own programs, which are now mature. EPA supplemented grant dollars with technical support to transfer "best practices" among states that promote effective program implementation across the nation.

**FY 2019 Activities and Performance Plan:**

Resources for this program are proposed for elimination in FY 2019.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$7,996.0) This program change proposes to eliminate funding for the Categorical Grant: Radon program.

**Statutory Authority:**

CAA Amendments of 1990; Radon Gas and Indoor Air Quality Research Act; Title IV of the SARA of 1986; TSCA, Section 6, Titles II and Title III (15 U.S.C. 2605 and 2641-2671); and IRAA, Section 306.

**Categorical Grant: Underground Storage Tanks**

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$1,479.4*** | ***$1,488.0*** | ***$0.0*** | ***-$1,488.0*** |
| Total Budget Authority | $1,479.4 | $1,488.0 | $0.0 | -$1,488.0 |

**Program Project Description:**

Releases of petroleum from underground storage tanks (UST) can contaminate groundwater, the drinking water source for many Americans. The State and Tribal Assistance Grant (STAG) program provides funding to states[27] to bring UST systems into compliance with release prevention and release detection requirements.

STAG funds are used by states to fund such activities as: seeking state program approval to operate the UST program in lieu of the federal program; approving specific technologies to detect leaks from tanks; ensuring that tank owners and operators are complying with notification and other requirements; ensuring equipment compatibility; conducting inspections; and implementing operator training.

**FY 2019 Activities and Performance Plan:**

Resources have been proposed for elimination for this program in FY 2019. States could elect to maintain core program work with state resources rather than federal.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$1,488.0) This funding change proposes to eliminate the Categorical Grant: Underground Storage Tanks program.

**Statutory Authority:**

Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.

[27] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

# State and Tribal Assistance Grants (STAG)

**Brownfields Projects**
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$88,370.2*** | ***$79,457.0*** | ***$62,000.0*** | ***-$17,457.0*** |
| Total Budget Authority | $88,370.2 | $79,457.0 | $62,000.0 | -$17,457.0 |

**Program Project Description:**

The Brownfields program awards grants and provides technical assistance to help states, tribes, local communities, and other stakeholders involved in environmental revitalization and economic redevelopment to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[28] This idle land drags down property values and can slow down a local economy. Brownfields redevelopment is a key to revitalizing main streets, neighborhoods, and rural communities; increasing property values and creating jobs. Since its inception, the Brownfields program has fostered a community-driven approach to reuse of contaminated sites. As of the end of FY 2017, grants awarded by the program have led to over 69,200 acres of idle land made ready for productive use and over 129,240 jobs and $24.7 billion leveraged.[29] By awarding brownfields grants, EPA makes investments in communities so that they can realize their own visions for land reuse, infrastructure development, economic growth, and job creation.

Under this program, EPA will focus on core activities, providing funding for: 1) assessment cooperative agreements and Targeted Brownfields Assessments (TBAs); 2) cleanup cooperative agreements; and 3) research, training, and technical assistance to communities for brownfields-related activities, including Land Revitalization.

A 2017 study found that housing property values increased 5 to 15.2 percent near brownfield sites when cleanup was completed.[30] Analysis of the data near 48 brownfields sites shows that an estimated $29 to $97 million in additional tax revenue was generated for local governments in a single year after cleanup. This is 2 to 7 times more than the $12.4 million EPA contributed to the cleanup of those brownfields.[31] In addition, based on historical data provided by the Assessment

[1] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY16; and (2) census data from the 20011-2015 American Community Survey.
[29] EPA's ACRES database.
[30] Haninger, K., L. Ma, and C. Timmins. 2017. The Value of Brownfield Remediation. *Journal of the Association of Environmental and Resource Economists, 4(1): 197-241.*
[31] Sullivan, K. A. 2017. Brownfields Remediation: Impact on Local Residential Property Tax Revenue. *Journal of Environmental Assessment Policy and Management, 19(3).*

Cleanup and Redevelopment Exchanges System (ACRES) database, $1 of EPA's Brownfields funding leverages between $16 and $17 in other public and private funding.[32]

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will build on current work to revitalize communities across the country by providing financial and technical assistance to assess, cleanup, and plan reuse at brownfields sites. The Brownfields program will continue to foster federal, state, tribal, local, and public-private partnerships to return properties to productive economic use. The activities described below will leverage approximately 5,270 jobs and approximately $1 billion in other funding sources.[33]

- Funding will support at least 105 assessment cooperative agreements (estimated $26.8 million) that recipients may use to inventory, assess, and conduct cleanup and reuse planning at brownfields sites, as authorized under CERCLA 104(k)(2). Approximately 630 site assessments will be completed under these agreements.

- EPA will provide $6.2 million for TBAs in up to 62 communities without access to other assessment resources or those that lack the capacity to manage a brownfields assessment grant. There is special emphasis for small and rural communities to submit requests for this funding to ensure equal access to brownfields assessment resources. These assessments will be performed through contracts and interagency agreements, as authorized by CERCLA 104(k)(2).

- Funding will support approximately 58 direct cleanup cooperative agreements (estimated $11.5 million) to enable eligible entities to clean up recipient owned properties as authorized under CERCLA 104(k)(3).

- In FY 2019, the Agency will begin alternating the Environmental Workforce Development & Job Training (EWDJT) competition to an every-other-year schedule.

- Funding also will support assessment and cleanup of abandoned underground storage tanks and other petroleum contamination found on brownfields properties (estimated $15.5 million) for up to approximately 62 brownfields assessment cooperative agreements and five cleanup cooperative agreements, as authorized under CERCLA 104(k)(2) and (3). The Brownfields statute requires the program to select the highest ranked proposals. In order to meet this requirement, EPA is requesting flexibility to use up to 25 percent of its CERCLA 104(k) funding to address petroleum contaminated sites versus the exact 25 percent identified by statute. This flexibility will allow EPA to select the highest risk projects and meet the demand of the communities applying for the various brownfields grants. Hazardous substances account for approximately two-thirds of all brownfields funding

[32] For more information, please visit www.epa.gov/brownfields.
[33] U.S. EPA, Office of Land and Emergency Management Estimate. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via EPA's ACRES database.

requests in the past three years, while the demand for petroleum funding hovers around one-third.

- Funding also will support training, research, technical assistance cooperative agreements, interagency agreements, and contracts to support states, tribes, and communities (estimated $2.0 million) for both the Brownfields and Land Revitalization programs and other assistance mechanisms, as authorized under CERCLA 104(k)(6).

- All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via the ACRES database and analyzed by EPA. Maintenance of ACRES, focus on the input of high quality data, and robust analysis regarding program outcomes and performance will continue to be a priorities during FY 2019.

**Performance Measure Targets:**

| (B32) Number of properties cleaned up using brownfields funding. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 130 | 130 |

| (B30) Number of brownfields sites made ready for anticipated use. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 684 | 684 |

| (B34) Jobs leveraged from brownfields activities. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 7,000 | 7,000 |

| (B29) Number of brownfield properties assessed. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 1,300 | 1,300 |

| (B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 1.1 | 1.1 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$17,457.0) This program change reflects a focus on assessment and direct cleanup grants, while reducing TBAs and other program activities.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Small Business Liability Relief and Brownfields Revitalization Act, §§ 101, 104, 107.

**Diesel Emissions Reduction Grant Program**
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$40,683.0*** | ***$59,593.0*** | ***$10,000.0*** | ***-$49,593.0*** |
| Total Budget Authority | $40,683.0 | $59,593.0 | $10,000.0 | -$49,593.0 |

**Program Project Description:**

The Diesel Emissions Reduction Act (DERA) Grant Program provides emission reductions from existing diesel engines through engine retrofits, rebuilds, and replacements; switching to cleaner fuels; idling reduction; and other clean diesel strategies. The DERA program was initially authorized in Sections 791-797 of the Energy Policy Act of 2005 and reauthorized by the Diesel Emission Reduction Act of 2010.

From goods movement to building construction to public transportation, diesel engines are the modern-day workhorse of the American economy. Diesel engines are extremely efficient and power nearly every major piece of machinery and equipment on farms, construction sites, in ports, and on highways. As the Agency's heavy-duty highway and nonroad diesel engines emissions standards came into effect in 2007 and 2008 respectively, new cleaner diesel engines started to enter the nation's fleet. However, today there are still more than 10 million engines in use that will continue to emit large amounts of nitrogen oxides and particulate matter. EPA's DERA program promotes strategies to reduce these emissions and protect public health, by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations, and state and local officials. While the DERA grants accelerate the pace at which dirty engines are retired or retrofitted, pollution emissions from the legacy fleet also will be reduced over time without additional DERA funding as portions of the fleet turnover are replaced with new engines that meet modern emission standards. However, even with attrition through fleet turnover, the Agency estimates that approximately one million old diesel engines would still remain in use in 2030.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will continue to target its discretionary funding to direct DERA grants and rebates to reduce diesel emissions in priority areas and areas of highly concentrated diesel pollution with a primary focus on ports and school buses. EPA estimates that about 39 million people in the U.S. currently live in close proximity to ports. These people can be exposed to air pollution associated with emissions from diesel engines at ports including particulate matter, nitrogen oxides, ozone, and air toxics, which can contribute to significant health

problems—including premature mortality, increased hospital admissions for heart and lung disease, increased cancer risk, and increased respiratory symptoms – especially for children, the elderly, outdoor workers, and other sensitive populations.[34] School buses provide the safest transportation to and from school for more than 25 million American children every day. However, diesel exhaust from these buses has a negative impact on human health, especially for children who have a faster breathing rate than adults and whose lungs are not yet fully developed.

Using the formula outlined in the Energy Policy Act of 2005, eligible U.S. states and territories receive 30 percent of the annual DERA appropriation for the establishment of clean diesel grant, rebate and loan programs. The remaining DERA funding is split into two categories. The first category allocates funds to a rebate program that was first established under DERA's 2010 reauthorization. Through the rebate mechanism, the Agency will more efficiently and precisely target the awards toward improving children's health and turning over the nation's school bus fleet. In addition, this rebate mechanism can be used to provide funding directly to private fleets. The second category allocates funds toward national grants focusing on areas with poor air quality, especially those impacted most severely by ports and goods movement. EPA also will continue to track, assess, and report the results of DERA grants, such as numbers of engines, emissions benefits, and cost-benefit information.[35] Finally, EPA will continue to provide diesel emission reduction technology verification and evaluation and provide that information to the public.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$49,593.0) This program change is a reduction in the overall amount of DERA grant funding, directing DERA grants and rebates to reduce diesel emissions in priority areas of highly concentrated diesel pollution.

**Statutory Authority:**

Energy Policy Act of 2005, §§ 741, 791-797; Diesel Emissions Reduction Act of 2010.

[34] EPA's National Port Strategy Assessment report of 2016, https://www.epa.gov/ports-initiative/national-port-strategy-assessment.
[35] List of all grant awards under DERA can be found at https://www.epa.gov/cleandiesel/clean-diesel-national-grants.

**Infrastructure Assistance: Clean Water SRF**
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$1,380,738.8*** | ***$1,384,421.0*** | ***$1,393,887.0*** | ***$9,466.0*** |
| Total Budget Authority | $1,380,738.8 | $1,384,421.0 | $1,393,887.0 | $9,466.0 |
| Total Workyears | 3.6 | 0.0 | 0.0 | 0.0 |

**Program Project Description:**

The Clean Water State Revolving Fund (CWSRF) program capitalizes state revolving loan funds in all 50 states and Puerto Rico to finance infrastructure improvements for public wastewater systems and projects to improve water quality. These funds directly support the Agency's goal to ensure waters are clean through improved water infrastructure and sustainable management.

The CWSRF is the largest source of federal funds for states to provide loans and other forms of assistance for water quality projects including construction of wastewater treatment facilities, water and energy efficiency projects, green infrastructure projects, and agricultural best management practices (BMPs). This program also includes a provision for set-aside funding for tribes to address serious wastewater infrastructure needs and associated health impacts. It also provides direct grant funding for the District of Columbia and territories. This federal investment is designed to be used in concert with other sources of funds to address water quality needs.[36] Additional tools, such as additional subsidization, are available to assist small and disadvantaged communities. The CWSRF program is a key component EPA's efforts to achieve innovative solutions to wastewater infrastructure needs, and realize economic and environmental benefits that will continue to accrue for years in the future.

The revolving nature of the funds and substantial state contributions have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far the nation has received close to three dollars of investment in water infrastructure.[37] As of June 2017, the state CWSRFs have provided over $126.1 billion in affordable financing for a wide variety of wastewater infrastructure and other water quality projects.[38] In the past year alone, nearly 1,500 assistance agreements went to communities of all sizes, funding over $7.4 billion in projects aimed at treating wastewater, addressing stormwater runoff, tackling non-point source pollution, and addressing a myriad of other environmental issues.[39] The CWSRF program measures and tracks

[36] See http://www.epa.gov/cwsrf for more information.
[37] See https://www.epa.gov/sites/production/files/2016-12/documents/us16.pdf for more information
[38] Clean Water State Revolving Fund National Information Management System. US EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2017).
[39] Clean Water State Revolving Fund National Information Management System. US EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2017).

the average national rate at which available funds are loaned, assuring that the fund program expeditiously supports EPA's water quality goals, as of June 30, 2017, over 98 percent of the available funding has been committed to projects.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. The Agency is requesting nearly $1.394 billion in FY 2019 to provide funding for critical wastewater infrastructure. In FY 2019, EPA requests nearly $2.3 billion for the Clean Water and Drinking Water State Revolving Funds, combined. These funding levels further infrastructure repair and replacement and would allow states, municipalities, and private entities to continue to finance high priority infrastructure investments that protect human health.

This federal investment will continue to enable progress toward the nation's clean water needs and infrastructure priorities and will contribute to the long-term environmental goal of impaired waterbodies attaining designated uses. EPA continues to work with states to meet several key objectives, such as:

- Linking projects to environmental results;
- Targeting assistance to small and underserved communities with limited ability to repay loans; and
- Ensuring the CWSRFs remain reliable sources of affordable funding.

EPA requests that 10-20 percent of the total CWSRF funds made available to each state be used to provide additional subsidization to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these).

In addition to capitalizing the CWSRF, a portion of the appropriation also will provide direct grants to communities within the tribes and territories. These communities are in great need of assistance given that their sanitation infrastructure lags behind the rest of the country causing significant public health concerns. To ensure that sufficient resources are directed toward these communities that face additional challenges, EPA continues to request a tribal set-aside of 2 percent, or $30 million, whichever is greatest, of the funds appropriated in FY 2019. EPA also continues to request a territories set-aside of 1.5 percent of the funds appropriated from the CWSRF for American Samoa, Guam, the Commonwealth of Northern Marianas, and the United States Virgin Islands.

EPA requests that up to $2 million of the tribal set-aside for training and technical assistance be related to operation and management of tribal wastewater treatment works. EPA also requests the ability to use the tribal and territorial set-asides to support planning and design of treatment works and for the construction, repair, or replacement of privately owned decentralized wastewater treatment systems serving one or more principal residences or small commercial establishments, authority similar to that already available to states. Expanded support for planning and design will protect the federal investment in wastewater infrastructure and ensure access to safe wastewater treatment for tribes and territories that face significant challenges with sanitation infrastructure. The ability for both the tribes and territories to construct, repair, or replace decentralized

wastewater treatment systems will allow the flexibility that these communities require to provide wastewater infrastructure that is appropriate for the communities' unique circumstances.

EPA will partner with states to ensure that the CWSRF continues to play an important role in promoting efficient system-wide planning; improvements in technical, financial and managerial capacity; and the design, construction and ongoing management of sustainable water infrastructure. EPA also continues to support the national implementation of the CWSRF American Iron and Steel (AIS) requirement. Through technical assistance, market analysis, and stakeholder engagement, the AIS program administers the requirement for use of domestic iron and steel products in water infrastructure projects.

Elsewhere in the FY 2019 budget, EPA requests $20 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program. Through WIFIA, EPA will make direct loans to regionally or nationally significant water infrastructure projects. These combined investments, the SRFs and WIFIA, further the Agency's ongoing commitment to infrastructure repair and replacement. These investments also will complement infrastructure funding requested through the President's Infrastructure Initiative.

**Performance Measure Targets:**

| (INFRA-03) Fund utilization rate for the CWSRF. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 98 | 98 |

Work under the Infrastructure Assistance: Drinking Water State Revolving Fund, Infrastructure Assistance: Clean Water State Revolving Fund, and the Water Infrastructure Finance and Innovation program projects all support performance measure (INFRA-01) Number of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$9,466.0) This program change is an increase to state Clean Water SRF programs, which EPA will apply based on the Clean Water Act formula. Combined investments in the two SRFs, along with WIFIA, will promote water and wastewater infrastructure improvements.

**Statutory Authority:**

Title VI of the Clean Water Act; Title V of the Water Resources Reform and Development Act of 2014.

**Infrastructure Assistance: Drinking Water SRF**
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$944,392.1*** | ***$857,371.0*** | ***$863,233.0*** | ***$5,862.0*** |
| Total Budget Authority | $944,392.1 | $857,371.0 | $863,233.0 | $5,862.0 |
| Total Workyears | 1.3 | 0.0 | 0.0 | 0.0 |

**Program Project Description:**

EPA's Drinking Water State Revolving Fund (DWSRF) is designed to assist public water systems in financing the costs of drinking water infrastructure improvements needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements and to protect public health as well as support state and local efforts to protect drinking water. The 2011 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA), conducted every four years, indicated a 20-year capital investment need of $384.2 billion for public water systems that are eligible to receive funding from state DWSRF programs. The capital investment need, based on the 2011 survey included approximately 52,000 community water systems and 21,400 not-for-profit non-community water systems (including schools and churches).[40] The needs reflect costs for repairs and replacement of leaking transmission pipes and deteriorated storage and treatment equipment, as well as other projects required to protect public health and to ensure compliance with the SDWA. The DWSRF can help communities replace lead service lines by providing principal forgiveness and low interest loans, and maximizing the use of the DWSRF set-asides to fund corrosion control studies when an action level exceedance is triggered.

To reduce public health risks and to help ensure safe and reliable delivery of drinking water nationwide, EPA makes capitalization grants to states so that they can provide low-cost loans and other assistance to eligible public water systems and maintain robust drinking water protection programs. The program emphasizes that, in addition to maintaining the statutory focus on addressing the greatest public health risks first, states can utilize set-asides to assist small systems and those most in need on a per household basis according to state affordability criteria.

The DWSRF program provides communities access to critical low-cost financing and offers a limited subsidy to help utilities address long-term needs associated with water infrastructure. Most DWSRF assistance is offered in the form of loans which water utilities repay from the revenues they generate through the rates they charge their customers for service. Water utilities in many communities may need to evaluate the rate at which they invest in drinking water infrastructure

[40] For more information, see: http://water.epa.gov/grants_funding/dwsrf/upload/epa816r13006.pdf.

repair and replacement to keep pace with their aging infrastructure, much of which may be approaching the end of its useful life.[41]

To protect public health and wellbeing, utilities must provide continuous access to safe drinking water. The delivery of safe drinking water is often taken for granted and is frequently undervalued, which presents considerable challenges to the completion of infrastructure upgrades that are necessary to protect public health. More than 151,000 public water systems[42] provide drinking water to the approximately 320 million persons in the U.S. More than 97 percent of these public water systems serve fewer than 10,000 persons.[43] While most small systems consistently provide safe, reliable drinking water to their customers, many small systems are facing a number of significant challenges in their ability to achieve and maintain system sustainability. EPA is emphasizing attention to the needs of these small communities/systems while retaining state flexibility in the management of their funds. EPA continues its small systems focus by working closely with state programs to improve public water system sustainability and public health protection for persons served by small water systems.

These approaches have resulted in high system compliance; 93 percent of community water systems (CWSs) met all applicable health-based standards, surpassing the FY 2017 target of 90 percent. In addition, 90.5 percent of the Indian Country population received drinking water that met all applicable health-based drinking water standards. Continuing this success in many small systems will be a challenge, given aging infrastructure, difficulties in complying with regulatory requirements, workforce shortages/high-turnover, increasing costs, and declining rate bases. In FY 2017, small community water system violations made up 94 percent[44] of the overall violations from all size systems.

*State Set-Asides*

States have considerable flexibility to tailor their DWSRF program to their unique circumstances. This flexibility ensures that each state has the opportunity to carefully and strategically consider how best to achieve the maximum public health protection. For example, states may set aside and award funds for targeted activities that can help them implement and expand their drinking water programs. The four DWSRF set-asides[45] are: Small System Technical Assistance (up to 2 percent), Administrative and Technical Assistance[46] (up to 4 percent, $400,000 or 1/5$^{th}$ percent of the current valuation of the fund, whichever is greater), State Program Management (up to 10 percent), and Local Assistance and Other State Programs (up to 15 percent). Taken together, approximately 31 percent of a state's DWSRF capitalization grant may be set aside for activities other than infrastructure construction. These set asides enable states to improve water system operation and management, emphasizing institutional capacity as a means of achieving sustainable water system operations. Historically, the states have set aside an annual average of 16 percent of the funds

[41] For more information, see: https://www.epa.gov/sites/production/files/2015-07/documents/epa816r13006.pdf
[42] For more information, see: https://www.epa.gov/waterdata/drinking-water-tools
[43] For more information, see: http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/pivottables.cfm
[44] https://www.epa.gov/waterdata/drinking-water-tools
[45] https://www.epa.gov/drinkingwatersrf/how-drinking-water-state-revolving-fund-works#tab-5
[46] https://www.congress.gov/bill/114th-congress/senate-bill/612/text

awarded to them for program development, of which 4 percent is used to administer the program; however, over the past three years, states have increased their set-asides taken to around 20 percent.

The federal investment is designed to be used in concert with other sources of funds to address drinking water infrastructure needs. States are required to provide a 20 percent match for their capitalization grant. Some states elect to leverage their capitalization grants through the public debt markets to enable the state to provide more assistance. These features, including state match leveraging, and the revolving fund design of the program, have enabled the states to provide assistance equal to 187 percent of the federal capitalization invested in the program since its inception in 1997. In other words, for every one dollar the federal government invests in this program, the states, in total, have been able to deliver $1.87 in assistance to water systems. In addition, the DWSRF's rate of funds utilized (the cumulative dollar amount of loan agreements divided by cumulative funds available for projects) was 96 percent in 2017, exceeding its target of 89 percent.

*National Set-Asides*

Prior to allotting funds to the states, EPA is required to reserve certain national level set-asides.[47] Two million dollars must, by statute, be allocated to small systems monitoring for unregulated contaminants to facilitate small water system compliance with the monitoring and reporting requirements of the Unregulated Contaminant Monitoring Regulation (UCMR). Historically, a three-year sampling period occurs within each five-year monitoring cycle. During the sampling period, fund utilization exceeds the annual appropriation of $2 million and the carry-over reserve funds from non-sampling years become essential to complete the small system monitoring efforts.

EPA will reserve up to 2 percent, or $20 million, whichever is greater, of appropriated funds for Indian tribes and Alaska Native Villages. These funds are awarded either directly to tribes or, on behalf of tribes, to the Indian Health Service through interagency agreements. Additionally, EPA will continue to set aside up to 1.5 percent for territories.[48]

In addition, the law[49] requires that none of the funds made available by a Drinking Water State Revolving Fund as authorized by Section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system unless all of the iron and steel products used in the project are produced in the United States. The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean Water and Drinking Water State Revolving Funds for carrying out the provisions for management and oversight of the requirements of this section.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. For FY 2019, EPA requests $863 million for the DWSRF

[47] Safe Drinking Water Act Sections 1452(i)(1), 1452(i)(2), 1452(j), and 1452(o), as amended.
[48] For more information see:
https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=d33d92f2df290e0c2365599cb09f0669
[49] Continuing Appropriations Act 2018 and Supplemental Appropriations for Disaster Relief Requirements Act, 2017 (P.L. 115-56), enacted September.

to help finance critical infrastructure improvement projects to public drinking water systems. In FY 2019, EPA requests nearly $2.3 billion for the Drinking Water and Clean Water State Revolving Funds, combined. The budget provides robust funding for critical drinking and wastewater infrastructure. These funding levels further the President's ongoing commitment to infrastructure repair and replacement and would allow states, municipalities, and private entities to continue to finance high priority infrastructure investments that protect human health. In addition, these funds directly support the Agency's goal to ensure waters are clean through improved water infrastructure and sustainable management to support drinking water.

The requested funding level reflects the documented needs for drinking water infrastructure and the need to improve infrastructure in small communities and will help the programs reach more communities due to the revolving nature of the funds. EPA will continue to foster its strong partnership with the states to provide small system technical assistance, with a focus on rule compliance, operational efficiencies, and system sustainability to ensure clean and safe water. In FY 2019, EPA will continue its effort to build the capacity of local utilities and existing state programs to expand their knowledge of the wide array of funding options available to meet future infrastructure needs. The requested funding for this program will support critical infrastructure investments to rebuild and enhance America's drinking water infrastructure.

In FY 2019, appropriated DWSRF funds will be allocated to the states in accordance with each state's proportion of total drinking water infrastructure need based on the latest DWINSA. EPA also has published data concerning the drinking water infrastructure needs of water systems serving tribes and Alaskan Native Villages. Also, there is a statutory requirement that each state and the District of Columbia receive no less than one percent of the allotment.

EPA will continue to work to target a significant portion of SRF assistance to small and underserved communities with limited ability to repay loans. In FY 2019, EPA will work with states to ensure not less than 20 and not more than 30 percent of a state's capitalization grant is provided as additional subsidization. EPA encourages states to utilize subsidization to assist disadvantaged communities and sustainability efforts.

As a result of EPA's efforts with states to fully utilize DWSRF funds available, unliquidated obligations (ULOs) decreased by 69 percent, or approximately $1 billion, from FY 2012 to FY 2017. In FY 2019, EPA will continue to work with states with higher ULOs to address institutional obstacles in order to eliminate or minimize their ULO amounts.

In FY 2019, the DWSRF program will continue to implement the Clean Water and Drinking Water Infrastructure Sustainability Policy that focuses on promoting system-wide planning that helps align water infrastructure system goals; analyzing a range of infrastructure alternatives, including energy efficient alternatives; and ensuring that systems have the financial capacity and rate structures to construct, operate, maintain, and replace infrastructure over time. As part of that strategy, the federal dollars provided through the State Revolving Funds also will act as a catalyst for efficient system-wide planning, improvements in technical, financial and managerial capacity; and the design, construction and ongoing management of sustainable water infrastructure.

In FY 2019, EPA is continuing emphasis on strengthening small system technical, managerial and financial capability through the implementation of the Capacity Development Program, the Operator Certification Program, the Public Water System Supervision state grant program, and the Drinking Water State Revolving Fund. The Capacity Development Program establishes a framework within which states and water systems can work together to help these small systems achieve the SDWA's public health protection objectives. The state Capacity Development Programs are supported federally by the Public Water System Supervision state grant funds and the set-asides established in the Drinking Water State Revolving Fund. Since the 1996 Amendments, states have implemented a variety of activities to assist small systems with their compliance challenges and enhance their technical, managerial, and financial capacity.

In addition to the robust funding for critical drinking and wastewater infrastructure, EPA requests $20 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program. Through WIFIA, EPA will make direct loans to regionally or nationally significant water infrastructure projects. These combined investments, the SRFs and WIFIA, further the Agency's ongoing commitment to infrastructure repair and replacement.

**Performance Measure Targets:**

| (INFRA-02) Fund utilization rate for the DWSRF. | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 96 | 97 |

Work under the Infrastructure Assistance: Drinking Water State Revolving Fund, Infrastructure Assistance: Clean Water State Revolving Fund, and the Water Infrastructure Finance and Innovation program projects all support performance measure (INFRA-01) Number of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$5,862.0) This program change reflects an increase in state Drinking Water SRF programs, which EPA will apply based on the Drinking Water Infrastructure Needs Survey formula. Combined investments in the two SRFs, along with WIFIA, will promote water and wastewater infrastructure improvements.

**Statutory Authority:**

Safe Drinking Water Act, § 1452.

**Infrastructure Assistance: Alaska Native Villages**
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$20,083.7*** | ***$19,864.0*** | ***$3,000.0*** | ***-$16,864.0*** |
| Total Budget Authority | $20,083.7 | $19,864.0 | $3,000.0 | -$16,864.0 |

**Program Project Description:**

The Alaska Rural and Native Village (ANV) program reduces disease and health care costs by providing critical basic drinking water and sanitation infrastructure (i.e., flushing toilets and running water) in vulnerable rural and Native Alaska communities that lack such services disproportionately when compared to the rest of the country. Alaskan rural and native water and sewer systems face not only the typical challenges associated with small system size, but also the challenging geographic conditions, such as permafrost, shortened construction seasons, and highly remote locations.

EPA's grant to the State of Alaska funds improvements and construction of drinking water and wastewater treatment facilities for these underserved communities. Investments in wastewater and drinking water infrastructure in rural Alaska and ANV communities contributed to an increase of access to water and sewer service from 60 percent in the late 1990s to a current level (FY 2016) of 94.9 percent of serviceable rural Alaska homes.[50]

The State of Alaska is best positioned to deliver these services to the ANV communities by coordinating across federal agencies and using the different programs to achieve a holistic series of solutions. Alaska uses a risk-based prioritization process to fund projects that will have the greatest public health and environmental benefit. The ANV program, in addition to funding system upgrades and construction, uniquely supports training, technical assistance, and educational programs to improve the financial management and operation and maintenance of sanitation systems.

The ANV technical assistance program helps to improve the long term sustainability of the rural utilities, creating transferable job skills in construction, operation and maintenance activities. The program also has helped to nearly double the number of properly certified drinking water treatment plant operators in Alaskan rural villages since FY 1992, and the number of non-compliant systems has decreased by close to 80 percent since FY 2006.[51]

[50] Based on data from the Indian Health Service (IHS) and the State of Alaska.
[51] As reported by the State of Alaska, Department of Environmental Conservation, Remote Maintenance Worker program outcome reports.

While the gains in the program have been significant, ANV communities continue to trail behind the non-Tribal/non-native population in the U.S. with access to water and sanitation. In Alaska, 5.1 percent of Native and Rural serviceable households[1] are without complete indoor plumbing, a much higher figure than the national average of 0.4 percent (US Census Survey 2012) of occupied homes that lacked complete indoor plumbing.

The ANV program has shown significant progress (see Figure 1 below) documenting, since 2005, the number of projects and ANV homes with increased access to safe water and sanitation (in combination with other federal agencies). Over this period of time the ANV program contributed about 35 percent (including the required State match) of all available funding from federal agencies.

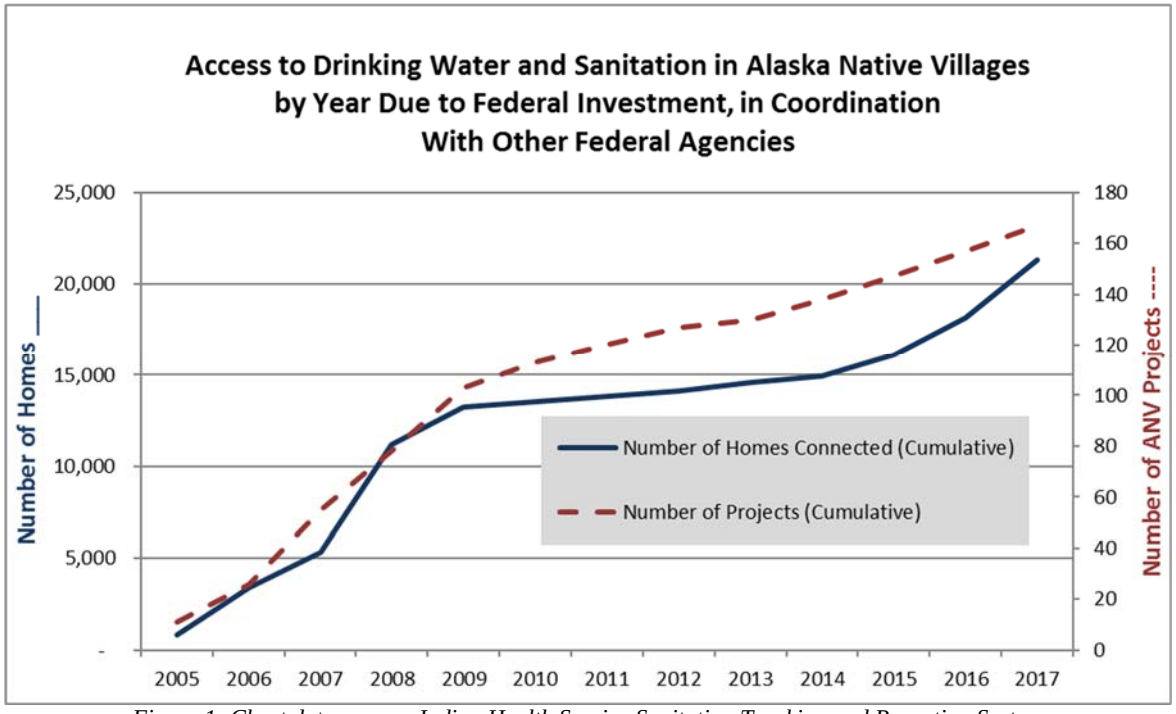



*Figure 1: Chart data source: Indian Health Service Sanitation Tracking and Reporting System*

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. The FY 2019 request of $3 million will provide water services for additional homes and maintain the existing level of wastewater and drinking water infrastructure that meets public health standards. Based on data from the past three years of funding to the ANV program, $3 million in ANV funds would improve the drinking water and/or wastewater services to about 350 homes in rural Alaska. Additionally, the FY 2019 request will continue to support training, technical assistance, and educational programs that protect existing federal investments in infrastructure by improving operation and maintenance of the systems.

In FY 2019, the Agency will continue to work with the State of Alaska to address sanitation conditions and maximize the value of the federal investment in rural Alaska. EPA will continue to

implement the Alaska Rural and Native Village "Management Controls Policy," adopted in June 2007, to ensure efficient use of funds by allocating them to projects that are ready to proceed or progressing satisfactorily. The Agency has made great strides in implementing more focused and intensive oversight of the ANV grant program through cost analyses, post-award monitoring, and timely closeout of projects.

The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in Alaska.

**Performance Measure Targets:**

| **(INFRA-04) Number of American Indian and Alaska Native homes provided access to safe drinking water in coordination with other federal agencies (cumulative).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 148,100 | 152,700 |

| **(INFRA-05) Number of American Indian and Alaska Native homes provided access to basic sanitation in coordination with other federal agencies (cumulative).** | **FY 2018 Target** | **FY 2019 Target** |
|---|---|---|
| | 105,764 | 110,464 |

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$16,864.0) This program change reduces support for the Alaska Rural and Native Villages program. EPA estimates that this request level will improve the drinking water and/or wastewater services to approximately 350 homes in rural Alaska. The State Revolving Funds are an additional source of infrastructure funding that can continue to fund water system improvements in Alaska.

**Statutory Authority:**

Safe Drinking Water Act Amendments of 1996, § 303; Clean Water Act, § 1263a.

**Infrastructure Assistance: Mexico Border**
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$10,628.2*** | ***$9,932.0*** | ***$0.0*** | ***-$9,932.0*** |
| Total Budget Authority | $10,628.2 | $9,932.0 | $0.0 | -$9,932.0 |

**Program Project Description:**

The U.S.-Mexico Border Water Infrastructure program supports the planning, design, and construction of water and wastewater treatment facilities along the border with all projects benefiting communities on the U.S. side of the border.

**FY 2019 Activities and Performance Plan:**

Resources are proposed for elimination for this program in FY 2019. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in U.S. communities along the border.

**Performance Measure Targets:**

This proposed disinvestment means that the Agency will no longer publish measures associated with this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$9,932.0) This program change proposes to eliminate the U.S.-Mexico Border Water Infrastructure program. Other sources of funding are available to support these efforts in U.S. communities along the border, most notably the Clean Water and Drinking Water State Revolving Funds.

**Statutory Authority:**

Treaty entitled "Agreement between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area, August 14, 1983".

**Targeted Airshed Grants**
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$19,818.1*** | ***$29,796.0*** | ***$0.0*** | ***-$29,796.0*** |
| Total Budget Authority | $19,818.1 | $29,796.0 | $0.0 | -$29,796.0 |

**Program Project Description:**

In FY 2017, this program requested applications for approximately $30 million in competitive grant funding to reduce air pollution in nonattainment areas that were ranked as the top five most polluted areas relative to annual ozone or $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS); as well as the top five areas relative to the 24-hour $PM_{2.5}$ NAAQS. This program assisted air control agencies in developing plans, conducting demonstrations, and implementing projects in order to reduce air pollution in these nonattainment areas.

**FY 2019 Activities and Performance Plan:**

Resources for this program are proposed for elimination in FY 2019. States can continue to fund emissions reduction activities through the EPA's core air grant programs and statutes.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$29,796.0) This program change proposes to eliminate the Targeted Airshed Grants program.

**Statutory Authority:**

P-L. 115-31.

**GKM Water Monitoring**

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***State and Tribal Assistance Grants*** | ***$105.5*** | ***$3,973.0*** | ***$0.0*** | ***-$3,973.0*** |
| Total Budget Authority | $105.5 | $3,973.0 | $0.0 | -$3,973.0 |

**Program Project Description:**

The Gold King Mine Water Monitoring program supports development and implementation of a program for monitoring of rivers contaminated by the Gold King Mine Spill.

**FY 2019 Activities and Performance Plan:**

Resources have been eliminated for this program in FY 2019.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (-$3,973.0) This program change eliminates the Gold King Mine Water Monitoring Program. There are other sources of funding that support water monitoring activities, including Pollution Control (Section 106) program grants.

**Statutory Authority:**

Water Infrastructure Improvements for the Nation Act, Title IV, Section 5004(d); Consolidated Appropriations Act, 2017, P. L. 115-31; Clean Water Act, § 106.

## Table of Contents – Water Infrastructure Finance and Innovation Fund

## APPROPRIATION: Water Infrastructure Finance and Innovation Fund
## Resource Summary Table

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Water Infrastructure Finance and Innovation Fund** | | | | |
| Budget Authority | $3,597.7 | $12,932.0 | $20,000.0 | $7,068.0 |
| Total Workyears | 9.6 | 12.0 | 12.0 | 0.0 |

## Bill Language: WIFIA

*For the cost of direct loans and for the cost of guaranteed loans, as authorized by the Water Infrastructure Finance and Innovation Act of 2014, $17,000,000, to remain available until expended: Provided, That such costs, including the cost of modifying such loans, shall be as defined in section 502 of the Congressional Budget Act of 1974: Provided further, That these funds are available to subsidize gross obligations for the principal amount of direct loans, including capitalized interest, and total loan principal, including capitalized interest, any part of which is to be guaranteed, not to exceed $2,073,000,000.*

*In addition, fees authorized to be collected pursuant to sections 5029 and 5030 of the Water Infrastructure Finance and Innovation Act of 2014 shall be deposited in this account, to remain available until expended, for the purposes provided in such sections.*

*In addition, for administrative expenses to carry out the direct and guaranteed loan programs, notwithstanding section 5033 of the Water Infrastructure Finance and Innovation Act of 2014, $3,000,000, to remain available until September 30, 2020.*

## Program Projects in WIFIA

(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Water Quality Protection | | | | |
| Water Infrastructure Finance and Innovation | $3,597.7 | $12,932.0 | $20,000.0 | $7,068.0 |
| **TOTAL WIFIA** | **$3,597.7** | **$12,932.0** | **$20,000.0** | **$7,068.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

# Water Quality Protection

**Water Infrastructure Finance and Innovation**
Program Area: Water Quality Protection
Goal: Core Mission
Objective(s): Provide Clean and Safe Water

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| ***Water Infrastructure Finance and Innovation Fund**** | ***$3,597.7*** | ***$12,932.0*** | ***$20,000.0*** | ***$7,068.0*** |
| Total Budget Authority | $3,597.7 | $12,932.0 | $20,000.0 | $7,068.0 |
| Total Workyears | 9.6 | 12.0 | 12.0 | 0.0 |

*The FY 2017 Appropriations Act (P.L. 115-31) provided the WIFIA program with $10 million; this funding supplemented $20 million previously provided in FY 2017 by a Continuing Resolution (P.L. 114-254).

**Program Project Description:**

The Nation is facing the challenge of finding sustainable financing for aging water infrastructure. Dependable, available drinking water and sanitation in communities relies on working, modern infrastructure, but leaking water collection and distribution systems, and inadequate drinking water and wastewater treatment continue to plague communities across the country. To help address this priority, Congress enacted the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA).[1] The WIFIA program was designed to stimulate capital market investment, not supplant it, by structuring WIFIA loans in a way that makes investment in projects attractive to market participants. The WIFIA program directly supports the Agency's goal to ensure waters are clean and safe through improved water infrastructure.

The WIFIA program is authorized to provide and service direct loans and loan guarantees to cover up to 49 percent of eligible costs for drinking water and wastewater infrastructure projects of regional or national significance. The WIFIA program is designed to offer credit assistance with flexible terms in order to attract private participation, encourage new revenue streams for infrastructure investment, and allow public agencies to get more projects done. The WIFIA program requires a small appropriation compared to its potential loan volume. The first round of selections for the $30 million from the FY 2017 appropriations has the potential, when combined with other funding sources, to spur up to $5 billion in total infrastructure investment. With $20 million in FY 2019 appropriations, EPA could potentially provide up to $2 billion in credit assistance, which could spur up to $4 billion in total infrastructure investment.[2] This makes the WIFIA program credit assistance a powerful new tool to help address a variety of water infrastructure needs.

[1] WIFIA is a subtitle within the Water Resources Reform and Development Act of 2014 (WRRDA).
[2] This approximation is based on estimated notional subsidy costs from FY17 projects. Actual subsidy cost will be determined on a loan-by-loan basis.

For the FY 2017 appropriated funds, EPA issued a Notice of Funding Availability on January 10, 2017, requesting prospective borrowers to submit Letters of Interest (LOI). EPA received 43 LOIs for direct loans by the April 10, 2017 deadline. On July 19, 2017, EPA announced the 12 projects selected to continue with the application process.[3] The selected projects encompassed the broad range of project types that the WIFIA program can finance including wastewater, drinking water, stormwater, and water recycling projects. Due diligence and underwriting activities will continue into FY 2018 with the expectation that funds will be obligated for water infrastructure projects in FY 2018.

Eligible assistance recipients include, amongst others, corporations and partnerships, municipal entities, and State Revolving Fund (SRF) programs. The WIFIA program will complement the existing SRF programs as an additional source of low-cost capital to help meet the United States' growing water infrastructure needs and address key priorities. Entities with complex water and wastewater projects are attracted to the WIFIA program and EPA will work to provide assistance to a diverse set of projects.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.2, Provide Clean and Safe Water in EPA's FY 2018 - 2022 Strategic Plan. The FY 2019 request of $20 million includes the funds necessary to finance WIFIA drinking water and wastewater infrastructure projects (following the requirements of the Federal Credit Reform Act of 1990 and OMB Circulars A-11 and A-129). While the WIFIA program provides expansive project eligibilities, particular project attributes will be emphasized in the project selection process. These attributes will be identified in the Notice of Funding Availability, published after appropriations, and may include attributes such as the extent of private financing, the ability to serve regions with significant water resource challenges, the regional or national significance, the likelihood that the project can proceed at an earlier date due to WIFIA financing, and the extent to which the project uses new or innovative approaches, among others.

Of the total $20 million request to implement the WIFIA program, $3 million is for EPA's management and operation administrative expenses, including contract support and associated payroll for 12 FTE. The request level coupled with the fee expenditure authority allows EPA to undertake the independent aspects of loan intake and origination; project technical evaluation, including credit review, engineering feasibility review, and loan term negotiation; risk management; portfolio management and surveillance; and loan servicing for an initial set of projects. The funds associated with the management and operation of the program will be available for two years.

The FY 2019 budget also includes authority to use fee revenue as outlined in Water Resources Reform and Development Act (WRRDA), Sections 5029(a), 5030 (b), and 5030(c). EPA plans to collect fees in FY 2019. Fee revenue is for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms. The WIFIA program fee expenditure authority would be in addition to the $3 million request for management and operations administrative expenses.

[3] For more information: https://www.epa.gov/wifia/wifia-fy-2017-selected-projects-summary-factsheets.

**Performance Measure Targets:**

| (INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA). | FY 2018 Target | FY 2019 Target |
|---|---|---|
| | 8 | 8 |

Work under the Infrastructure Assistance: Drinking Water State Revolving Fund, Infrastructure Assistance: Clean Water State Revolving Fund, and the Water Infrastructure Finance and Innovation program projects all support performance measure (INFRA-01) Number of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+$675.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$6,393.0) This program change reflects an increase in the WIFIA program. This change represents an increase to the amount of credit subsidy funding available to make loans under this program.

**Statutory Authority:**

Water Resources Reform and Development Act of 2014, Title V, Subtitle C. Further Continuing and Security Assistances Appropriations Act, 2017, P.L. 114-254.

## Table of Contents – Hazardous Waste Electronic Manifest System Fund

**Environmental Protection Agency**
**FY 2019 Annual Performance Plan and Congressional Justification**

## APPROPRIATION: Hazardous Waste Electronic Manifest System Fund
## Resource Summary Table

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Hazardous Waste Electronic Manifest System Fund** | | | | |
| Budget Authority | $4,915.4 | $3,156.0 | $.0 | -$3,156.0 |
| Total Workyears | 8.0 | 7.9 | 10.0 | 2.1 |

## Bill Language: E-Manifest

*The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2019.*

*Note —This language is proposed under the FY 2019 Administrative Provisions.*

## Program Projects in E-Manifest

(Dollars in Thousands)

| Program Project | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Resource Conservation and Recovery Act (RCRA) | | | | |
| RCRA: Waste Management | $4,915.4 | $3,156.0 | $0.0 | -$3,156.0 |
| **TOTAL E-Manifest** | **$4,915.4** | **$3,156.0** | **$0.0** | **-$3,156.0** |

**For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.*

# Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Environmental Program & Management | $58,277.0 | $58,439.0 | $41,907.0 | -$16,532.0 |
| ***Hazardous Waste Electronic Manifest System Fund*** | ***$4,915.4*** | ***$3,156.0*** | ***$0.0*** | ***-$3,156.0*** |
| Total Budget Authority | $63,192.4 | $61,595.0 | $41,907.0 | -$19,688.0 |
| Total Workyears | 310.2 | 333.7 | 213.2 | -120.5 |

**Program Project Description:**

The Resource Conservation and Recovery Act (RCRA) requires companies that ship hazardous waste to track and report the estimated five million shipments each year. The Hazardous Waste Electronic Manifest Establishment Act (e-Manifest Act, Public Law 112-195), enacted on October 5, 2012, required EPA to develop a fee-based electronic hazardous waste manifest system.

EPA estimates the e-Manifest system will reduce the burden associated with paper manifests by between 300,000 and 700,000 hours, saving state and industry users more than $90 million annually, once electronic manifests are widely adopted.[1] The e-Manifest system will provide better knowledge of waste generation and final disposition; enhanced access to manifest information; and greater transparency for the public about hazardous waste shipments.

In FY 2014, Congress established the "Hazardous Waste Electronic Manifest System Fund" to carry out the activities necessary to implement the e-Manifest program, including system development, fee collection authority, rulemaking, and advisory committee establishment. The collected fees will support the continued development and operation of the program.

**FY 2019 Activities and Performance Plan:**

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA's FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $39 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Fees will be utilized for the operation of the system and necessary program expenses. The authority to collect and spend fees requires authorization from Congress in annual appropriations bills.

[1] From a 2009 programmatic estimate, cited in *Hazardous Waste Management System; Modification of the Hazardous Waste Manifest System; Electronic Manifests; Final Rule.* 40 CFR § 260, 262, 263, 264, 265, and 271.

In FY 2019, EPA plans to perform the following key activities:

- Operate the e-Manifest system and have it accept both electronic and paper manifests;
- Continue to provide outreach to stakeholders on the e-Manifest system;
- Implement appropriate accounting and financial reporting interfaces needed to collect and manage user fees, manage and adjust fees as appropriate, and comply with the auditing requirements of the Hazardous Waste Electronic Manifest Act;
- Continue to hold periodic meetings of the e-Manifest Advisory Board, consisting of state and industry stakeholders and IT experts, to provide input on system operation and implementation of the user fee regulation; and
- Continue to develop and enhance the e-Manifest system software to expand capabilities, improve user acceptance, and enhance overall program efficiencies.

**Performance Measure Targets:**

Currently there are no performance measures specific to this program.

**FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):**

- (+10.0 FTE) This program change reflects the total number of reimbursable FTE that will support and enhance the e-Manifest program in FY 2019.

- (-$3,156.0/ -7.9 FTE) This program change shifts funding for the program from annual appropriations to e-Manifest user fee collections. Fee collections are expected to begin in quarter four of FY 2018 and will be fully fee-funded in FY 2019.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act and the Hazardous Waste Electronic Manifest Establishment Act, 42 United States Code 6901 *et seq.* – Sections 3004, 3005, 3024, 8001.

## Table of Contents – Performance Measures

## Objective 1.1 – Improve Air Quality: Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.

**Strategic Measure – By September 30, 2022, reduce the number of nonattainment areas to 101[1].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM NA1) Number of Nonattainment Areas.** | 155 | 138 |
| ***Additional Information:*** For this measure, nonattainment areas are areas that EPA has determined do not meet a primary or secondary National Ambient Air Quality Standard (NAAQS), or that contribute to air quality in a nearby area that does not meet a non-revoked primary or secondary NAAQS. Focusing efforts on reducing the number of nonattainment areas will help ensure that states and EPA, in the spirit of cooperative federalism, prioritize taking timely and necessary actions to improve air quality in nonattainment areas through the implementation of permanent and enforceable pollution control measures, so that states can submit, and EPA can approve, redesignation requests for areas once they attain a NAAQS. This measure tracks the status of the baseline of 166 areas that were designated nonattainment and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated nonattainment after October 1, 2017 are not included in baseline. For multi-state nonattainment areas, all state portions of the area must be redesignated to attainment for the area to be removed from the list of nonattainment areas. | | |
| **(PM NA2) Percent of U.S. Population Living in Nonattainment Areas.** | 36 | 34 |
| ***Additional Information:*** The percent of the U.S. population living in a nonattainment area represents the number of people out of the total U.S. population living in an area that is designated nonattainment for at least one of the NAAQS. If an area is designated nonattainment for multiple NAAQS, the population residing in the area is counted only once. For example, the Los Angeles area is currently nonattainment for five NAAQS, but the population living in the area is counted only once. This measure tracks population living in areas that remain in nonattainment from the baseline population of 37 percent living in nonattainment areas and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated nonattainment after October 1, 2017 are not included in the baseline. The data source for this measure is EPA's own "Summary Nonattainment Area Population Exposure Report," available on the EPA's Green Book website (https://www.epa.gov/green-book), which groups nonattainment areas by geographic locations and estimates the total population for nonattainment areas for a single NAAQS, and across all NAAQS. The percent of the estimated population for nonattainment areas and across all NAAQS is compared to the U.S. population based on the 2010 census. | | |
| **(PM DV) Percent of measured air quality improvement in counties not meeting the NAAQS from the 2016 baseline.** | -2 | -3 |
| ***Additional Information:*** This measure shows progress in reducing pollutant concentrations in counties not meeting one or more NAAQS relative to the 2016 calculated baseline. The measure is presented as the aggregate percent change in design value concentrations – a statistic that describes the air quality status of a given location relative to the NAAQS – since the baseline year. The aggregate percent change is weighted by the number of counties violating for each pollutant so more weight is given to pollutants with more violating counties. All counties met the NAAQS for carbon monoxide and nitrogen dioxide in 2016, so those two pollutants are not considered in this measure. The other criteria pollutants (ozone, PM2.5, PM10, sulfur dioxide, and lead) are part of this measure. For ozone and PM2.5, targets are based on predictions of future year concentrations resulting from the Community Multi-Scale Air Quality model which estimates the impact of existing and future control strategies. For the other pollutants (PM10, sulfur dioxide, and lead), such modeling predictions are unavailable. Therefore, targets for those pollutants are based a regression curve using historical data. The results | | |

[1] The baseline is 166 nonattainment areas as of 10/1/2017.

| | | |
|---|---|---|
| for this measure are updated annually based on design values computed from actual monitored concentrations. Counties are used for this measure to provide finer resolution in the air quality data. | | |
| **(PM SIP) Number of SIPs acted on by the regional offices.** | 150 | 175 |
| ***Additional Information:*** The Clean Air Act (CAA) requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans (SIPs), are developed by state and local air quality management agencies and submitted to EPA for approval. SIPs vary in type and complexity. The CAA requires EPA to review SIP submittals consistent with applicable requirements, and to take action on submissions within 18 months of receipt (EPA has up to six months to determine whether submissions are complete, and 12 months to act upon completed submissions) before they are considered backlogged. Each year, EPA identifies the number of active SIPs, current and backlogged, and considers a range of anticipated incoming SIPs for that year. The number of SIPs changes year to year depending on actions taken in the prior year as well as new SIP submittals. The estimated number of actions will also vary year to year depending on the status of EPA rulemakings, state priorities for which SIPs they want acted on, and potential new SIPs or SIP revisions. As of October 1, 2017, there were 346 backlogged SIPs. The targets for this measure are annual (non-cumulative) numbers. | | |
| **(PM M92) Cumulative percentage reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.** | 67 | 70 |
| ***Additional Information:*** The AQI is an index for reporting daily air quality. An AQI value of 100 generally corresponds to the NAAQS for each of the five pollutants (ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide) included in the index. When AQI values are above 100, air quality is considered to be unhealthy for certain sensitive groups of people and then for everyone as AQI values get higher. This measure assigns more weight to higher AQI values and counties with more people. Because ozone and PM2.5 typically account for the vast majority of AQI values above 100, this measure largely tracks changes in those two pollutants. The targets for this measure are based on a regression curve using historical data. Refreshed data are included in the calculation of FY 2018 and FY 2019 targets. The results are updated annually based on the actual monitored concentrations. | | |
| **(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all of the applicable emission requirements and may be entered into commerce.** | 5,200 | 5,275 |
| ***Additional Information:*** The CAA requires that engines, vehicles, equipment, components, or systems receive a certificate of conformity which demonstrates compliance with the applicable requirements prior to introduction to U.S. commerce. This measure is the number of these certificates issued in a given year. EPA reviews all submitted requests and issues certificates of conformity when the manufacturer has demonstrated compliance with all applicable requirements. This measure illustrates EPA's annual certification workload. The number of certification requests is dictated by the product planning of manufacturers and will fluctuate from year to year. | | |
| **(PM NOX) Ozone Season emissions of nitrogen oxides ($NO_x$) from electric power generation sources (tons).** | 590,000 | 580,000 |
| ***Additional Information:*** The EPA operates seven nationwide and/or multi-state Clean Air Allowance Trading Programs that help address air pollutants from large stationary sources. This measure tracks the annual ozone season nitrogen oxide (NOx) emissions (in tons) from sources in four of those programs: an annual NOx trading program and two ozone season NOx trading programs operated by EPA on behalf of 27 states in the eastern U.S. under Title I of the Clean Air Act, as well as a national NOx emissions reduction program for the power sector operated by EPA under Title IV of the Clean Air Act, the Acid Rain Program.<br><br>Nitrogen oxides (NOx) are precursors for fine particulate matter (PM2.5) and ground-level ozone (O3). Researchers have associated PM2.5 and O3 exposure with adverse health effects in toxicological, clinical, and epidemiological studies. Lowering exposure to PM2.5 and O3 contributes to human health benefits. The ozone season corresponds to the warm summer months when ozone formation is highest (May 1 – September 30). Reductions in NOx emissions during the ozone season help areas attain ozone standards. | | |

2015 is the baseline of actual emissions established with the implementation of the Cross-State Air Pollution Update Rule. In 2015, sources in EPA's nitrogen oxide (NOx) trading programs emitted 616,689 tons of NOx during ozone season.

**Other Core Work supporting Objective 1.1.**

| Performance Measures | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM G18) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication.** | 65 | 65 |
| ***Additional Information:*** The GHG Reporting Program has 41 sectors that include more than 8,000 facilities and suppliers. Both facilities and suppliers are required to report their data annually by March 31st. After submission of the data, the agency conducts a verification review that lasts approximately 150 days and includes a combination of electronic checks, staff review, and follow-up with facilities to identify any reporting errors and have them corrected before publication. The 150-day period includes 60 days for EPA to review reports and identify potential data quality issues, 75 days for reporters to resolve these issues, and 15 days for EPA to review responses or resubmitted reports. EPA typically publishes the data by October 1st each year (see: https://www.epa.gov/ghgreporting). | | |
| **(PM S01) Remaining US Consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, measured in tons of Ozone Depleting Potential (ODP).** | 1,520 | 1,520 |
| ***Additional Information:*** The base of comparison for assessing progress is the domestic consumption cap of Class II HCFCs as set by the Parties to the Montreal Protocol. Each ozone-depleting substance is weighted based on the damage it does to the stratospheric ozone layer or, its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8% of the domestic ODP-weighted consumption of chlorofluorocarbons (CFCs) in 1989 plus the ODP-weighted level of HCFCs in 1989 (a total of 15,240 tons). As defined by the Montreal Protocol, the amount of consumption equals the amount of production plus imports minus exports. | | |
| **(PM R35) Percentage level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations.** | 80 | 80 |
| ***Additional Information:*** Level of readiness of radiation personnel and assets based on preparedness metrics such as exercise and drill performance, training completed, procedures developed, and equipment maintained. The maximum level of readiness is 100% and is dependent upon an annual evaluation of specific criteria that identify progress in six categories: 1) RadNet; 2) Field Support; 3) Analytical Support; 4) Public Information; 5) Data Management; and 6) Science Team. | | |
| **(PM R36) Average number of days before availability of quality assured ambient radiation air monitoring data during an emergency.** | 0.3 | 0.3 |
| ***Additional Information:*** EPA's RadNet system has more than 130 radiation air monitors in 50 states. RadNet runs 24 hours a day, 7 days a week collecting near-real-time measurements of gamma radiation. Over time, RadNet sample testing and monitoring results demonstrate the normal background levels of environmental radiation. In emergencies, EPA provides quality assured data as quickly as possible. In 2005, the average time between collection and availability of data for release by EPA during emergency operations was 2.5 days. | | |

**Objective 1.2 – Provide for Clean and Safe Water: Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.**

| **Strategic Measure – By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700[2].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM DW-01) Number of community water systems out of compliance with health-based standards.** | 3,510 | 3,420 |
| ***Additional Information:*** This measure tracks community water systems (CWSs) out of compliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) that overlap any part of the year. A CWS is a public water system that supplies water to the same population year-round. There are approximately 50,000 CWSs. Data are derived from the Safe Drinking Water Information System Federal Data Warehouse (SDWIS-FED), which contains information about violations of the NPDWRs by public water systems as reported to EPA by the primacy agencies (states and tribes with EPA-delegated enforcement responsibility). | | |
| **(PM DW-02) Number of community water systems without a sanitary survey within the last three years (five years for outstanding performance).** | 4,473 | 4,373 |
| ***Additional Information:*** A sanitary survey is an on-site review of the water sources, facilities, equipment, operation, and maintenance of a public water system for the purpose of evaluating the adequacy of the facilities for producing and distributing safe drinking water. The Interim Enhanced Surface Water Treatment Rule (IESWTR) and the Ground Water Rule (GWR) require primacy agencies to conduct a sanitary survey of each CWS at least once every three years (or every five years for CWSs with outstanding performance). | | |
| **(PM DW-03) Percentage of population served by CWSs that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.** | 92 | 92 |
| ***Additional Information:*** This measure tracks violations from currently CWSs that overlap any part of the year. Data are derived from SDWIS-FED. | | |
| **(PM DW-04) Percentage of the population in Indian Country served by community water systems that receive drinking water that meets all applicable health-based drinking water standards.** | 87 | 88 |
| ***Additional Information:*** This measure tracks violations from currently open and closed CWSs in Indian country that overlap any part of the year. Data are derived from SDWIS-FED. | | |

[2] Baseline is 3,600 community water systems out of compliance with health-based standards as of FY 2017.

| **Strategic Measure – By September 30, 2022, increase by $40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA)[3].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).** | 8 | 8 |
| ***Additional Information:*** Combined, the three primary water infrastructure programs, Drinking Water State Revolving Fund (DWSRF), Clean Water State Revolving Fund (CWSRF), and Water Infrastructure Finance and Innovation Act (WIFIA) program, represent the largest federal source of funds to address this critical component of our nation's drinking water and clean water infrastructure. Non-federal dollars are loans made from recycled loan repayments, bond proceeds, state match, and interest earnings. Baseline is $32 billion in non-federal dollars leveraged from the DWSRF and CWSRF between FY 2013 and FY 2017. The baseline does not include WIFIA leveraged dollars. | | |
| **(PM INFRA-02) Fund utilization rate for the DWSRF.** | 96 | 97 |
| ***Additional Information:*** The fund utilization rate shows how many dollars of assistance were provided for each dollar made available for projects. It measures all funds (federal and non-federal) signed into loans against all funds (federal and non-federal) made available for projects. | | |
| **(PM INFRA-03) Fund utilization rate for the CWSRF.** | 98 | 98 |
| ***Additional Information:*** The fund utilization rate shows how many dollars of assistance were provided for each dollar made available for projects. It measures all funds (federal and non-federal) signed into loans against all funds (federal and non-federal) made available for projects. Data are collected annually from all 51 state CWSRF programs (50 states and Puerto Rico), reported by municipal and other facility operators, and EPA's regional staff to the National Information Management System (NIMS) database. In FY 2002, the fund utilization rate was 91 percent. | | |
| **(PM INFRA-04) Number of American Indian and Alaska Native homes provided access to safe drinking water in coordination with other federal agencies (cumulative).** | 148,100 | 152,700 |
| ***Additional Information:*** This measure tracks the number of homes with access to potable water from data obtained from the Indian Health Service's (IHS) Project Data System (PDS). There was a total of 400,096 American Indian and Alaska Native homes as of January 1, 2017. | | |
| **(PM INFRA-05) Number of American Indian and Alaska Native homes provided access to basic sanitation in coordination with other federal agencies (cumulative).** | 105,764 | 110,464 |
| ***Additional Information:*** This measure tracks the number of homes provided access to basic sanitation (wastewater treatment service) from data obtained from IHS's PDS. There was a total of 400,096 American Indian and Alaska Native homes as of January 1, 2017. | | |

[3] Baseline is $32 billion in non-federal dollars leveraged from the CWSRF and DWSRF between FY 2013 and FY 2017 (i.e., loans made from recycled loan repayments, bond proceeds, state match, and interest earnings). The baseline does not include WIFIA leveraged dollars because the program's first loans are anticipated to close in FY 2018.

| **Strategic Measure – By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles[4].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM SWP-01) Reduction in the number of square miles of watershed with surface water not meeting standards (cumulative).** | No Target Established | 9,000 |
| ***Additional Information:*** This measure will track the progress of water quality standards attainment in waters previously identified as impaired in the Integrated Report as of October 1, 2018. Progress will be evident by a positive trend in previously impaired waters attaining water quality standards. Water quality standards attainment means that 1) the impairments have been effectively removed by corrective actions (i.e. restoration efforts) and 2) the waterbody now either fully supports the use or meets the water quality criterion for that particular pollutant or stressor for which it had been impaired. Data will be tracked in the Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS). States will submit to EPA their Integrated Report which will include information on the status of their waters, and state geospatial data will be used to calculate the measure. No result will be reported in FY 2018. Draft baseline: 464,020 square miles of watershed with surface water not meeting standards. | | |
| **(PM TMDL-01) Square miles associated with state priority waters addressed by a TMDL, other restoration plan, or protection approach.** | 35,000 | 50,000 |
| ***Additional Information:*** This measure tracks state priority waters projected to have a Total Maximum Daily Load (TMDL), alternative restoration or protection plan in place. EPA, states and tribes cooperatively developed A Long-Term Vision for Assessment, Restoration and Protection under the Clean Water Act Section 303(d) Program, which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, alternative restoration plans, and protection approaches – to restore and protect water quality. The goal is to have 100% of priority waters with plans approved or accepted by 2022. Data are tracked in ATTAINS. In 2017, there were 100,275 square miles of state priority waters. | | |
| **(PM NPDES-01) Percentage of high-priority state NPDES permits that are issued in the fiscal year.** | 80 | 80 |
| ***Additional Information:*** Results are calculated by dividing the number of high-priority National Pollutant Discharge Elimination System (NPDES) permits issued during the current fiscal year by the total number of permits selected by states as high-priority for that fiscal year. High-priority permits are those in need of reissuance that have been identified by states as environmentally or programmatically significant. Data are derived from EPA's Permit Management Oversight System (PMOS) database, which incorporates data from EPA's NPDES Database, and the Integrated Compliance Information System (ICIS-NPDES). | | |
| **(PM NPDES-02) Percentage of high-priority EPA and state NPDES permits (including tribal) that are issued in the fiscal year.** | 80 | 80 |
| ***Additional Information:*** Results are calculated by dividing the number of high-priority National Pollutant Discharge Elimination System (NPDES) permits issued during the current fiscal year to the total number of permits selected as high-priority for the current fiscal year. High-priority permits are those in need of reissuance that have been identified by states and EPA Regions as environmentally or programmatically significant. Data are derived from EPA's Permit Management Oversight System (PMOS) database, which incorporates data from EPA's NPDES Database, and the Integrated Compliance Information System (ICIS-NPDES). | | |

[4] Draft baseline is 464,020 square miles of impaired waters as of 9/2017, to be updated in 10/2018.

**Objective 1.3 – Revitalize Land and Prevent Contamination: Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.**

| **Strategic Measure – By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide[5].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM S10) Number of Superfund sites made ready for anticipated use site-wide.** | 51 | 51 |
| ***Additional Information:*** The sitewide ready for anticipated use (SWRAU) measure tracks EPA's progress in cleaning up and preparing Superfund sites for reuse, while ensuring human health and environmental protection. It measures the number of construction complete National Priorities List (NPL) or Superfund Alternative Approach (SAA) sites for which all cleanup goals in the Record(s) of Decision (ROD) or other remedy decision document(s) have been achieved for media that may affect current and reasonably anticipated future land uses of the site, so that there are no unacceptable risks; and that all institutional or other controls required in the ROD or other remedy decision document(s) have been put in place. The SWRAU determination is made directly in Superfund Enterprise Management System (SEMS) once it is determined that the site meets all required criteria and has been approved as such by appropriate EPA regional personnel. The universe of sites tracked for this performance measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements. Through FY 2017, EPA ensured that a total of 836 sites, including 828 final and deleted sites and 8 non-NPL sites with SAA agreements in place, met the criteria to be determined SWRAU. As of the end of FY 2017, there were 1,342 sites on the NPL and 51 non-NPL sites with active SAA agreements. | | |
| **(PM 115) Number of Superfund remedial site assessments completed.** | 650 | 580 |
| ***Additional Information:*** This measure tracks the number of screening-level assessments at sites submitted to the Superfund program for potential placement on the National Priorities List. The measure includes the number of site assessment reports completed at non-federal sites by EPA and its state and tribal partners, and the number of EPA reviews of site assessment reports completed by other federal agencies at federal facility sites. Assessment data are tracked in SEMS. Assessment results are used to determine whether cleanup may be warranted under a Superfund managed or monitored program. The SEMS active site inventory included approximately 1,750 sites that needed one or more assessments at the beginning of FY 2018, plus around 300 new sites are assessed each year for potential inclusion in this inventory. | | |
| **(PM 170) Number of remedial action projects completed at Superfund sites.** | 95 | 95 |
| ***Additional Information:*** This performance measure augments the construction completion measure and documents the completion of a discrete scope of activities supporting a Superfund cleanup. The measure demonstrates incremental progress in reducing risk to human health and the environment at Superfund cleanups. Multiple remedial action projects may be necessary prior to achieving site-wide construction completion. Regional remedial action project completion (RAPC) data are tracked in SEMS. The universe of sites tracked for this performance measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with a Superfund Alternative Agreement. | | |
| **(PM 141) Number of Superfund sites with remedy construction completed.** | 11 | 11 |
| ***Additional Information:*** This performance measure tracks site-wide completion of physical construction of all cleanup actions, including actions to address all immediate threats and to bring all long-term threats under control. EPA regional offices document construction completion (CC) in a Preliminary Close Out Report (PCOR) which is | | |

[5] By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.

| | | |
|---|---|---|
| reviewed by EPA headquarters. The PCOR signature date is entered in SEMS by the region and EPA headquarters enters the achievement of the CC in SEMS. The universe of sites tracked for this performance measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with Superfund Alternative Agreements. | | |
| **(PM 151) Number of Superfund sites with human exposures brought under control.** | 8 | 8 |
| ***Additional Information:*** This performance measure documents progress achieved in controlling unacceptable human exposures to contamination at sites and denotes a site-wide accomplishment. Human exposure determinations for sites can change over time as conditions across portions (operable units) of a site change. EPA regional offices enter human exposure determinations and supporting data into SEMS. It is important to note that this performance measure is a net accomplishment as sites can shift between human exposure under control to human exposure not under control or human exposure insufficient data. The change in status often occurs when a previously unknown exposure pathway (e.g., vapor intrusion) or contaminant is discovered and a reasonable expectation exists that people could be exposed or there is insufficient data to make such a determination until further investigation takes place. The universe of sites tracked for this performance measure includes final and deleted National Priorities List (NPL) sites and since FY 2014, non-NPL sites with Superfund Alternative Approach agreements. Through FY 2017, EPA ensured that a total of 1,475 sites, including 1,439 final and deleted NPL sites and 36 non-NPL sites with SAA agreements in place, met the criteria to be determined human exposure under control. | | |
| **(PM 152) Number of Superfund sites with contaminated groundwater migration brought under control.** | 11 | 11 |
| ***Additional Information:*** This performance measure documents whether groundwater contamination is below protective, risk-based levels or, if not, whether the migration of contaminated groundwater is stabilized and there is no unacceptable discharge to surface water. This performance measure denotes a site-wide accomplishment and also reflects a net accomplishment as sites can shift between groundwater migration under control to groundwater migration not under control or to groundwater migration insufficient data determinations. Monitoring is conducted to confirm that affected groundwater remains in the original area of contamination. The change in status often occurs when data from a remedial investigation indicate that contaminated groundwater migration is occurring at a site. Regions enter groundwater migration determinations and supporting data into SEMS. The universe of sites tracked for this performance measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with Superfund Alternative Approach agreements. Through FY 2017, EPA ensured that a total of 1,169 sites, including 1,143 final and deleted NPL sites and 26 sites with SAA agreements in place, met the criteria to be determined groundwater migration under control. | | |
| **(PM 137) Number of Superfund removals completed.** | 175 | 175 |
| ***Additional Information:*** This measure is a tabulation of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal-related hazardous waste cleanups, known as Superfund removal actions, including those that are Superfund-lead and Potentially Responsible Party (PRP)-lead. There is no pre-established universe of removal sites, as removal actions occur after a release has occurred. Data are tracked in SEMS. | | |
| **(PM FF1) Percentage of Superfund federal facility sites construction complete.** | 83 | 85 |
| ***Additional Information:*** This performance measure represents the percent construction complete of the 174 federal facility Superfund NPL sites. The measure is calculated in SEMS using data from the 2,276 operable units (OUs) at federal facilities. The measure is calculated based on the average of three factors: (1) percentage of OUs construction complete; (2) percentage of actions within an OU complete: and (3) percentage complete of the planned duration of those actions. The number of OUs being addressed has increased recently as a result of site discovery, the Military Munitions Response program and emerging contaminants. The addition of OUs leads to a growing denominator, thus reducing the overall percentage result reported. | | |

| **Strategic Measure – By September 30, 2022, make 3,420 additional brownfields sites RAU[6].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM B30) Number of brownfields sites made ready for anticipated use.** | 684 | 684 |
| ***Additional Information:*** This performance measure tracks the number of properties/sites benefiting from EPA brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. This activity is expected to result in additional sites available for productive reuse, while also helping to quantify the impact of funding from EPA's brownfields program. | | |
| **(PM B29) Number of brownfield properties assessed.** | 1,300 | 1,300 |
| ***Additional Information:*** This performance measure tracks the number of properties that have been environmentally assessed for the first time using EPA brownfields funding, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. This activity will result in identifying which brownfields are ready to be redeveloped for productive reuse, and which brownfields need to be cleaned up to a regulatory risk-based standard prior to redevelopment. | | |
| **(PM B32) Number of properties cleaned up using brownfields funding.** | 130 | 130 |
| ***Additional Information:*** This performance measure tracks the number of properties that have been cleaned up to a regulatory risk based standard using EPA brownfields funding, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. This typically occurs under one of two conditions: (1) a clean or no further action letter (or its equivalent) has been issued by the state or tribe under its voluntary response program (or its equivalent) for cleanup activities at the property; or (2) the cooperative agreement recipient or property owner, upon the recommendation of an environmental professional, has determined and documented that on-property work is finished. Ongoing operation and maintenance activities or monitoring may continue after a cleanup completion designation has been made. | | |
| **(PM B34) Jobs leveraged from brownfields activities.** | 7,000 | 7,000 |
| ***Additional Information:*** This performance measure tracks the number of cleanup and redevelopment jobs leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. These are actual numbers reported by recipients that are based on jobs resulting from environmental work at the site or the redevelopment of the site. | | |
| **(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.** | 1.1 | 1.1 |
| ***Additional Information:*** This performance measure tracks the number of additional dollars leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. | | |

[6] By the end of FY 2017, 5,993 brownfields properties/sites had been made RAU.

| **Strategic Measure – By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU[7].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.** | 75 | 91 |
| ***Additional Information:*** This performance measure tracks the number of RCRA corrective action facilities made ready for anticipated use (RAU). To be determined RAU, facilities must meet the following criteria: human exposure under control, final cleanup goals achieved for media that would impact the anticipated use, and if needed, controls in place to ensure long-term protectiveness. The universe for this measure are the 3,779 facilities subject to RCRA corrective action. Information will be entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure is a latter step in the progression toward completing facility cleanup. | | |
| **(PM CA1) Percentage of RCRA corrective action facilities with human exposures to toxins under control.** | 94 | 95 |
| ***Additional Information:*** This performance measure tracks the percentage of RCRA corrective action facilities that have met the RCRA environmental indicator for human exposure under control. The universe is the agency's list of 3,779 high priority facilities. Information will be entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure is an early step in the progression toward completing facility cleanup. | | |
| **(PM CA2) Percentage of RCRA corrective action facilities with migration of contaminated groundwater under control.** | 88 | 89 |
| ***Additional Information:*** This performance measure tracks the percentage of RCRA corrective action facilities that have met the RCRA environmental indicator for groundwater migration under control. The universe is the agency's list of 3,779 high priority facilities. Information will be entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure is an early step in the progression toward completing facility cleanup. | | |
| **(PM CA5) Percentage of RCRA corrective action facilities with final remedies constructed.** | 70 | 71 |
| ***Additional Information:*** This performance measure tracks the percentage of RCRA corrective action facilities with final remedies constructed. The universe is the agency's list of 3,779 high priority facilities. Information will be entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure is mid-term step in the progression toward completing facility cleanup. | | |
| **(PM CA6) Percentage of RCRA corrective action facilities with corrective action performance standards attained.** | 33 | 34 |
| ***Additional Information:*** The performance measure tracks the percentage of RCRA corrective action facilities with have met final corrective action standards. Facilities at this milestone may still require long-term controls to ensure protectiveness. The universe is the agency's list of 3,779 high priority facilities. Information will be entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure is a late step in the progression towards completing facility cleanup. | | |
| **(PM HW5) Number of renewals or clean-closures at permitted hazardous waste facilities.** | 64 | 64 |
| ***Additional Information:*** This performance measure tracks RCRA hazardous waste permit renewals or clean-closures in the universe of permitted facilities using EPA's RCRAInfo system. This does not include all permit maintenance since permit modifications cannot be projected and are not included. Maintaining updated permits ensures that permitted facilities have consistent and protective standards to prevent release; proper standards for waste management can protect human health, prevent land | | |

[7] By the end of FY 2017, 1,232 RCRA corrective action facilities had been made RAU site-wide.

| | | |
|---|---|---|
| contamination/degradation and other releases, and avoid future cleanups and associated substantial costs. At the end of FY 2017, 1,081 (81 percent) of a universe of 1,340 permitted facilities had up-to-date permits. | | |
| **(PM HW4) Percentage of hazardous waste units with initial controls in place to prevent release.** | 45 | 48 |
| ***Additional Information:*** This performance measure tracks the facilities that need an initial permit or other initial control. This goal tracks the percentage of those units that have been permitted, clean-closed, or otherwise had initial controls to prevent release (using EPA's RCRAInfo system). Issuance of controls decreases the risk of future releases and enhances protection of human health and the environment. At the end of FY 2017, 208 (42 percent) of 500 facilities in need of controls had initial controls (baseline of facilities in need of controls was assessed in 2014). | | |

| **Strategic Measure – By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater migration[8].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.** | 11,200 | 11,200 |
| ***Additional Information:*** This performance measure tracks the number of petroleum-contaminated sites where the states, tribes and EPA have completed cleanup activities. The states and EPA regional offices report the number of cleanups completed within the reporting period (every 6 months based on the fiscal year). The state totals and the EPA regional totals of cleanups completed in Indian country are added together to determine the national number of cleanups completed for the reporting period and the fiscal year. EPA uses the LUST4 database to track progress. The universe totals of confirmed releases pending cleanup will change over time as releases are found and cleanups are completed. | | |
| **(PM 113) Number of LUST cleanups completed in Indian country that meet risk-based standards for human exposure and groundwater migration.** | 16 | 16 |
| ***Additional Information:*** This performance measure tracks the number of petroleum-contaminated sites in Indian country where EPA has completed cleanup activities. EPA regional offices report the number of cleanups completed within the reporting period (every 6 months based on the fiscal year). The EPA regional totals of cleanups completed in Indian country determine the national number of cleanups completed for the reporting period and the fiscal year. EPA uses the LUST4 database to track progress. The universe totals of confirmed releases pending cleanup will change over time as releases are found and cleanups are completed. | | |
| **(PM 114) Number of confirmed releases at UST facilities in Indian country.** | 11 | 11 |
| ***Additional Information:*** This measure tracks the number of new confirmed releases at underground storage (UST) facilities in Indian country. This measure has a direct relation to releases needing to be cleaned up ("backlog" of cleanup sites). EPA regional offices report the number of confirmed releases within the reporting period (every 6 months based on the fiscal year). EPA uses the LUST4 database to track progress. The universe totals will change over time as releases are found and confirmed. | | |

[8] By the end of FY 2017, 469,898 LUST cleanups had been completed.

| **Other Core Work supporting Objective 1.3.** | | |
|---|---|---|
| **Performance Measures** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM PCB) Number of approvals issued for polychlorinated biphenyl (PCB) cleanup, storage and disposal activities.** | 160 | 160 |
| ***Additional Information:*** This performance measure tracks the number of PCB approvals under TSCA Section 761. The approvals are issued by EPA and tracked by EPA regional offices and headquarters. There is no universe for the number of approvals because facilities choose to submit approvals, as needed. PCB permit approval activities are not delegated to the states. | | |
| **(PM 438) Number of inspections conducted at oil facilities subject to the Spill Prevention, Control and Countermeasure regulation.** | 410 | 410 |
| ***Additional Information:*** This performance measure tracks the number of EPA inspections occurring at Spill Prevention, Control and Countermeasure (SPCC) facilities. There are approximately 540,000 facilities in the SPCC universe. Data are tracked in the EPA's Oil database. | | |
| **(PM 437) Number of inspections conducted at oil facilities subject to the Facility Response Plan regulation.** | 200 | 200 |
| ***Additional Information:*** This performance measure tracks the number of EPA inspections occurring at Facility Response Plan (FRP) facilities across the country. There are approximately 4,600 facilities in the FRP universe. Data are tracked in the EPA's Oil Database. | | |
| **(PM CH2) Number of risk management plan inspections conducted.** | 175 | 175 |
| ***Additional Information:*** The Risk Management Plan (RMP) program implements section 112(r) of the 1990 Clean Air Act Amendments. The RMP program requires facilities (approximately 12,500) that use extremely hazardous substances to develop a Risk Management Plan. The information required from facilities under the RMP program helps local fire, police, and emergency response personnel prepare for and respond to chemical emergencies. Data are tracked in the EPA's RMP database. | | |

**Objective 1.4 – Ensure Safety of Chemicals in the Marketplace: Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.**

**Strategic Measure – By September 30, 2022, complete all EPA-initiated TSCA risk evaluations for existing chemicals in accordance with statutory timelines[9].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.** | No Target Established | 1 |

***Additional Information:*** This measure tracks new risk evaluation activity under the Toxic Substances Control Act (TSCA), as amended in 2016 by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. The risk evaluation process is the second step, following prioritization and before risk management, in EPA's existing chemical process under the TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. The purpose of risk evaluation is to determine whether a chemical substance presents an unreasonable risk to health or the environment, under the conditions of use. As part of this process, EPA must evaluate both hazard and exposure, and ensure decisions are based on the weight-of-scientific-evidence. To count toward the target, an evaluation must be completed within three years. Accordingly, the deadline for the first 10 risk evaluations, which were commenced on December 19, 2016, is December 19, 2019. While work is already underway, no target is established for FY 2018. A risk evaluation is considered complete when the final risk evaluation is published in the Federal Register.

**Strategic Measure – By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines[10].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM TSCA2) Number of TSCA risk management actions for existing chemicals completed within statutory timelines.** | No Target Established | 5 |

***Additional Information*:** This measure tracks new risk management actions – proposed and final rules – undertaken as a result of risk evaluations conducted under TSCA and for certain Persistent, Bioaccumulative, and Toxic (PBT) chemicals. Statute requires EPA to propose rules under TSCA Section 6 for PBT chemicals by June 21, 2019, with final rules to be issued by December 21, 2020. For risk management actions following identification of unreasonable risk to human health or the environment in a risk evaluation, final risk management actions must be completed within two years. While the statute allows for a two-year extension, this measure tracks the performance against the initial deadline only. The first new risk management actions (proposed rules) for PBT chemicals under amended TSCA are expected to be completed in FY 2019. While

[9] There is no baseline for this measure, as the program is operating under new statutory authority.

[10] There is no baseline for this measure, as the program is operating under new statutory authority.

work is already underway, no target is established for FY 2018. This measure does not include risk management actions for chemical substances for which risk assessments were completed prior to enactment of the Lautenberg Act.

| **Strategic Measure – By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines[11].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM TSCA3) Percent of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within statutory timelines.** | 65 | 80 |
| *Additional Information:* This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. Statute requires that 100% of these new chemical reviews be completed within 90 days. While the statute allows for an extension of up to 90 days, this measure tracks performance against the initial 90-day deadline only. EPA anticipates a steady increase in performance, increasing from the 11.7% actual in FY 2017, to 80% by FY 2019, and 100% by FY 2022. | | |

| **Strategic Measure – By September 30, 2022, complete all cases of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions for the pesticides registration review program[12].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.** | 58 | 75 |
| ***Additional Information:*** Through the Pesticide Registration Review program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the United States be registered (licensed) by the EPA to ensure that they do not cause "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, the EPA must complete the first 15-year cycle of registration review by October 1, 2022. As of FY 2017, 251 decisions of a known universe of 725 cases were completed. | | |
| **(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.** | 70 | 72 |
| ***Additional Information:*** Through the Pesticide Registration Review program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the United States be registered (licensed) by the EPA to ensure that they do not cause | | |

[11] Baseline is 11.7% of determinations made within 90 days in FY 2017.

[12] Baseline is 251 decisions completed by the close of FY 2017 out of the known universe of 725.

"unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, the EPA must complete the first 15-year cycle of registration review by October 1, 2022. As of FY 2017, 364 draft risk assessments of a known universe of 725 cases were completed.

**Strategic Measure – By September 30, 2022, reduce the Pesticide Registration Improvement Act (PRIA) registration decision timeframe by an average of 60 days.[13]**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.** | 643 | 631 |
| ***Additional Information:*** To expedite the review and licensing of pesticides new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017. There are 36 different PRIA categories that relate to new active ingredients, with statutory time frames ranging from 7-24 months. Data are tracked and maintained internally by EPA. | | |
| **(PM PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where the original PRIA due date was not met.** | 303 | 291 |
| ***Additional Information:*** To expedite the review and licensing of pesticides new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average of 316 days exceeding the PRIA decision timeframes in the statute (range: 15-1,538 days) for 42 new active ingredients completed in FY 2015-2017. | | |
| **(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).** | 99 | 99 |
| ***Additional Information:*** The average of decisions completed on-time from FY 2014-2016 was 94%. More information on PRIA can be found on https://www.epa.gov/pria-fees/pria-overview-and-history. Whereas PM PRIA1 and PM PRIA2 measure performance for new active ingredient decisions only, this measure relates to all PRIA categories described in the fee tables in FIFRA section 33(b)(3). Additionally, FIFRA section 33(f)(5) allows that EPA and the applicant may mutually agree to extend a decision time review period. Decisions completed on or before the negotiated due date but after the original PRIA due date are still considered "on-time" under this measure. | | |

[13] Baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017.

## GOAL 2 - COOPERATIVE FEDERALISM: REBALANCE THE POWER BETWEEN WASHINGTON AND THE STATES TO CREATE TANGIBLE ENVIRONMENTAL RESULTS FOR THE AMERICAN PEOPLE.

### Objective 2.1 – Enhance Shared Accountability: Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.

**Strategic Measure – By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities[14].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM ST1) Number of grant commitments achieved by states, tribes, and local communities.** | No Target Established | TBD |

***Additional Information:*** Grant commitments are tasks that are jointly negotiated by EPA and the state, tribal, or local grant recipient. For this measure, EPA is only looking at grant commitments in Performance Partnership Grants (PPGs) – a financial tool that allows states and tribes to combine separate "streams" of categorical grant funding, from across 20 eligible categorical grants, into one multi-program grant with a single budget. The baseline, universe (number of commitments contained in PPGs) and 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported.

**Strategic Measure – By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews[15].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM ST2) Number of alternative shared governance approaches to address state, tribal, and local community reviews.** | No Target Established | TBD |

***Additional Information:*** EPA will work with states and tribes to find alternative approaches to shared governance, seeking to provide flexibility and streamline oversight of state and tribal programs. Shared governance is the concept where management of federal environmental programs is shared with state, tribal, or local governments. The Agency will pilot new approaches to oversight (e.g., permit reviews) where we have the legal flexibility to do so and streamline those processes by which EPA reviews and approves state and tribal actions. An alternative shared governance approach is any change to an EPA oversight or review process, made to reflect the shared governance concept. EPA will use Lean management system tools to identify areas where EPA and states, tribes, and local governments can streamline current oversight activities. The baseline and FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported.

[14] Baseline will be determined in FY 2018.

[15] Baseline will be determined in FY 2018.

| **Other Core Work supporting Objective 2.1.** | | |
|---|---|---|
| **Performance Measures** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.** | 10,000 | 10,000 |
| ***Additional Information:*** This measure includes new data elements, such as off-site compliance monitoring activities (e.g., record reviews), not previously tracked or counted, and reflects a recognition that states conduct the vast majority of inspections and an EPA focus on direct implementation programs. | | |
| **(PM 426) Number of compliance assurance actions in accordance with EPA's civil enforcement response policies.** | No Target Established | 4,000 |
| ***Additional Information:*** This measure includes both EPA's formal civil enforcement action conclusions and informal enforcement actions. Definitions of formal and informal enforcement vary depending on the statute but formal actions are generally used to address more serious violations while informal actions are for less serious violations. An example of a formal enforcement action is a judicial action. An example of an informal enforcement action is a warning letter. No target is established for FY 2018, but results will be reported. | | |
| **(PM 427) Number of regulatory sectors served by national web-based compliance assistance centers.** | 17 | 18 |
| ***Additional Information:*** As of FY 2017, EPA has 17 national web-based compliance assistance centers, providing access to information through web sites, telephone assistance lines, and e-mail discussion groups so that businesses, colleges and universities, tribes, local governments and federal facilities can understand and comply with environmental requirements and save money through pollution prevention techniques. These centers serve regulatory sectors, or facilities with similar operations, processes or practices that are subject to a similar set of regulatory requirements. | | |
| **(PM 428) Number of in-person and live webinar trainings provided to states to expand capacity building.** | 100 | 100 |
| ***Additional Information:*** In FY 2017, EPA conducted approximately 90 in-person and live webinar trainings in order to grow infrastructure and leadership necessary for states to implement environmental enforcement programs. The FY 2018 and 2019 targets for this measure aim to maintain this level of activity. | | |
| **(PM 429) Percentage of early Environmental Impact Statement (EIS) engagement** | 60 | 70 |
| ***Additional Information:*** This measure tracks projects on which EPA submits comments on the Draft EIS to the Lead Agency within 45 days of the public comment period or with Lead Agency authorized extension, as a percentage of the total number of comment letters issued. EPA is charged under Section 309 of the Clean Air Act to review the EIS's of other federal agencies and to comment on the adequacy and the acceptability of the environmental impacts of the proposed action. EPA participation may involve meeting with the Lead Agency in person or by phone, or providing written comments with recommendations to mitigate impacts of the proposed project or improve the development of the National Environmental Policy Act (NEPA) analysis. Early engagement by stakeholders in the NEPA process can support process efficiencies and improved project outcomes. | | |
| **(PM AD4) Cumulative number of state, tribal, and community partners that have integrated data, models, information, and other decision-support tools developed by EPA for climate resiliency into their planning processes.** | 150 | 200 |

| | | |
|---|---|---|
| ***Additional Information:*** A key goal of EPA's work on climate resiliency is to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare, and adapt to a changing climate. This measure focuses on providing the tools, training, technical assistance, data, models, and other information they need to build their adaptive capacity. | | |
| **(PM AD5) Cumulative number of state, tribal, and community partners that have incorporated climate resiliency into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements).** | 150 | 200 |
| ***Additional Information:*** This measure focuses on supporting climate-resilient investments across the nation. | | |

**Objective 2.2 – Increase Transparency and Public Participation: Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.**

**Strategic Measure – By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests[16].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM FO1) Reduce the FOIA backlog.** | No Target Established | TBD |
| ***Additional Information:*** EPA will focus on reducing the FOIA backlog the Agency has built up over the years, and enhancing the FOIA process – which gives the public the right to make requests for federal agency records. The complexity and volume of electronic documents required to be searched, collected, and reviewed has increased over time. The Agency will ensure that it can support the timely searching and collection of electronically-stored information for purposes of responding to FOIA requests and other information needs in a cost-effective, sustainable manner. This should not only help the Agency provide the public with the information requested, but also reduce the fees and lawsuits the Agency incurs from missing FOIA response deadlines. The specific measure, baseline and FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported. | | |
| **(PM FO2) Percentage of FOIA requests completed within statutory deadlines.** | No Target Established | TBD |
| ***Additional Information:*** The baseline and FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported. | | |

[16] Baseline will be determined in FY 2018.

**GOAL 3 - RULE OF LAW AND PROCESS: ADMINISTER THE LAW AS CONGRESS INTENDED, TO REFOCUS THE AGENCY ON ITS STATUTORY OBLIGATIONS UNDER THE LAW.**

**Objective 3.1 – Compliance with the Law: Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.**

**Strategic Measure – By September 30, 2022, reduce the average time from violation identification to correction[17].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM 430) Average time to move EPA civil cases referred to the Department of Justice in FY 2013 or later to settlement or having a complaint filed (years).** | No Target Established | 3.0 |
| ***Additional Information:*** This measure is calculated, for the civil judicial referrals settled during a given year, as the average time from the date of referral to the Department of Justice to settlement or having a complaint filed. Cases included in this measure are those referred in FY 2013 or later. Data for this measure are tracked in EPA's Integrated Compliance Information System. From FY 2010 through FY 2017, the average time to move EPA civil judicial referrals to settlement or having a complaint filed was 3.2 years. No target is established for FY 2018, but results will be reported. | | |
| **(PM 431) By FY 2018, identify one or two direct implementation programs that use administrative and informal enforcement tools to pilot for reducing the time between identification of a violation to correction. Also in FY 2018, gather data to establish baselines against which to measure progress.** | Identify Pilot Program(s) and Establish Baselines | Implement Pilot |
| ***Additional Information:*** Informal enforcement tools may include Notices of Violation (NOV), Notices of Noncompliance, and violation letters. | | |

**Strategic Measure – By September 30, 2022, increase the environmental law compliance rate[18].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM 432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees not in significant noncompliance with their permit limits.** | 76 | 79 |

[17] Baseline will be determined in FY 2018.

[18] This concept will be piloted by focusing initially on increasing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees not in significant noncompliance with their permit limits to 88% from a baseline of 76% from Q4 FY 2016 to Q3 FY 2017. Other program areas may be included in this strategic measure during the FY 2018-2022 timeframe.

| | | |
|---|---|---|
| ***Additional Information:*** From Q4 FY 2016 – Q3 FY 2017, the percentage of permittees not in significant noncompliance with their permit limits was 76.0%. This is based on annual significant noncompliance (SNC)/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees for which EPA has highly reliable data. Major and minor permittees that were in SNC/Category 1 noncompliance at any time during the one-year period are counted in the percentage denominator. No reduction from baseline is expected in FY 2018. SNC/Category 1 noncompliance are a specific type of violation, the severity of which are classified based on duration, severity, and type of violation. For more information, see: https://echo.epa.gov/help/facility-search/npdes-program-search-criteria-help | | |
| **(PM 433) By FY 2018, develop a compliance rate pilot in a second program (in addition to NPDES) and implement in FY 2019.** | Identify Pilot | Implement Pilot |
| | | |

| **Other Core Work supporting Objective 3.1.** | | |
|---|---|---|
| **Performance Measures** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.** | 325 | 325 |
| ***Additional Information:*** This measure combines environmental benefits from pounds of air, water, hazardous and non-hazardous waste, and toxics/pesticides pollutants reduced, treated, or eliminated through concluded enforcement actions. Prior to FY 2018, pounds of pollutants reduced, treated, or eliminated for different media were tracked using separate measures. | | |
| **(PM 435) Number of potentially responsible party (PRP) and other party commitments to perform or pay for cleanup and/or reuse of contaminated sites.** | 110 | 110 |
| ***Additional Information:*** EPA is reinvigorating efforts to secure PRP commitments to perform timely, high quality cleanup by reducing oversight costs for PRPs that perform timely, high quality work; increasing PRP and Agency personnel adherence to project deadlines; utilizing enforcement authorities to get work underway quickly and to keep work on schedule; and streamlining the dispute resolution process. PRPs and other parties made an average of 100 commitments to perform or pay for cleanup and/or reuse of contaminated sites from FY 2013 to FY 2016. | | |
| **(PM 418) Percentage of criminal cases having the most significant health, environmental, and deterrence impacts.** | 65 | 65 |
| ***Additional Information:*** The mission of EPA's Criminal Enforcement Program is to investigate, help prosecute, and thereby deter the most egregious environmental offenders. The criminal program collects data on a variety of case attributes to evaluate the range, complexity, and quality of our national docket. In 2010, the program developed a case selection methodology to ensure the identification, investigation, and prosecution of cases with significant environmental, human health, and deterrence impact. The data elements used in this tiering methodology include information about human health and environmental impacts, the nature of the pollutant and the release, and the profile and compliance history of the subject(s). Since instituting the tiering system, the percentage of "higher tier" cases has steadily risen. There are valuable cases which do not fit into the higher tiered criteria. Tiering parallels U.S. sentencing guidelines for criminal cases. | | |
| **(PM 419) Percentage of criminal cases with individual defendants.** | 75 | 75 |

| | | |
|---|---|---|
| ***Additional Information:*** During the early years of EPA's criminal program, organizational defendants made up approximately 70% of the total defendants charged and individual defendants made up the remaining 30%. By FY 2017, these figures had greatly changed: 90% of cases had an individual charged and 10% were cases where only an organizational defendant(s) was charged. | | |
| **(PM 421) Percentage of conviction rate for criminal defendants.** | 85 | 85 |
| ***Additional Information:*** While case outcomes fluctuate based on their specific characteristics, as well as the prosecutorial and sentencing decisions made by the U.S. Department of Justice and the federal courts, EPA's Criminal Enforcement Program has maintained a historically high conviction rate for defendants charged with environmental crimes. | | |

## Objective 3.2 – Create Consistency and Certainty: Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.

**Strategic Measure – By September 30, 2022, meet 100% of legal deadlines imposed on EPA.**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM RG1) Percentage of legal deadlines met by EPA.** | No Target Established | TBD |

***Additional Information:*** This measure tracks progress toward EPA meeting its statutory, regulatory, and court-ordered deadlines. EPA is reinvigorating its approach to regulatory development and prioritizing meeting legal deadlines to ensure that expectations for the regulated community and the public are clear and comprehensive and that Agency can achieve its core mission in a manner that is defensible and consistent with its authorities. The baseline and FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported.

**Strategic Measure – By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours[19].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated.** | 2,000,000 | 2,000,000 |

***Additional Information:*** EPA will develop a process of continuous improvement for managing the paperwork burden on regulated entities associated with EPA's Information Collection Rules, and reduce the burden where possible with a goal of eliminating 2,000,000 hours of unnecessary or duplicative reporting per year toward the goal of 10,000,000 hours by the end of FY 2022. Annual increments represent permanent changes in reporting burden. The data are tracked in OMB's RegInfo.gov database.

**Other Core Work supporting Objective 3.2.**

| Performance Measures | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM RG3) Number of EO 13771 regulatory actions issued.** | No Target Established | TBD |

***Additional Information:*** This measure is an OMB requirement based on the Presidential Memorandum M-17-23. The FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported. In FY 2017 EPA issued one EO 13771 regulatory action.

[19] Baseline is estimated at 173,849,665 information collection and reporting hours.

| | | |
|---|---|---|
| **(PM RG4) Number of EO 13771 deregulatory actions issued.** | No Target Established | TBD |
| ***Additional Information:*** This measure is an OMB requirement based on the Presidential Memorandum M-17-23. The FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported. In FY 2017, EPA issued 16 EO 13771 deregulatory actions. | | |
| **(PM RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.** | -$40 Million | TBD |
| ***Additional Information:*** This measure is an OMB requirement based on the Presidential Memorandum M-17-23. In FY 2017, the total incremental cost of all EO 13771 regulatory and deregulatory actions was -$21.5 million. The incremental cost values are annualized values applying a 7 percent discount rate and using 2016 dollars. | | |

## Objective 3.3 – Prioritize Robust Science: Refocus the EPA's robust research and scientific analysis to inform policy making.

| Strategic Measure – By September 30, 2022, increase the number of research products meeting customer needs[20]. | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM RD1) Number of Office of Research and Development (ORD) research products meeting customer needs.** | No Target Established | TBD |
| ***Additional Information:*** A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. A research product qualifies as "meeting customer needs" based on a scoring system that takes account of usability, product quality, and timeliness. Baseline and FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported. | | |
| **(PM AC1) Percentage of planned research products completed on time by the Air and Energy research program.** | 100 | 100 |
| ***Additional Information:*** A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. | | |
| **(PM AC2) Percentage of planned research outputs delivered to clients for use in improving air quality.** | 100 | 100 |
| ***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. Delivery of a research output means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. To ensure research products are responsive to partners' needs, ORD has a formalized process for developing and modifying program activities, including engagement with partners when making modifications. | | |
| **(PM CS1) Percentage of planned research products completed on time by the Chemical Safety for Sustainability research program.** | 100 | 100 |
| ***Additional Information:*** A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products are needed to be transformed into the output. The actual product completion date is self-reported. | | |
| **(PM CS2) Percentage of planned research outputs delivered to clients and partners to improve their capability to advance the environmentally sustainable development, use, and assessment of chemicals.** | 100 | 100 |

[20] Baseline will be determined in FY 2018.

| | | |
|---|---|---|
| ***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. Delivery of a research output means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. To ensure research products are responsive to partners' needs, ORD has a formalized process for developing and modifying program activities, including engagement with partners when making modifications. | | |
| **(PM HC1) Percentage of planned research products completed on time by the Sustainable and Healthy Communities research program.** | 100 | 100 |
| ***Additional Information:*** A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. | | |
| **(PM HC2) Percentage of planned research outputs delivered to clients, partners, and stakeholders for use in pursuing their sustainability goals.** | 100 | 100 |
| ***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. Delivery of a research output means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. To ensure research products are responsive to partners' needs, ORD has a formalized process for developing and modifying program activities, including engagement with partners when making modifications. | | |
| **(PM HS1) Percentage of planned research products completed on time by the Homeland Security research program.** | 100 | 100 |
| ***Additional Information:*** A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. | | |
| **(PM HS2) Percentage of planned research outputs delivered to clients and partners to improve their capabilities to respond to contamination resulting from homeland security events and related disasters.** | 100 | 100 |
| ***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. Delivery of a research output means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. To ensure research products are responsive to partners' needs, ORD has a formalized process for developing and modifying program activities, including engagement with partners when making modifications. | | |
| **(PM RA1) Percentage of planned research products completed on time by the Human Health Risk Assessment research program.** | 100 | 100 |
| ***Additional Information:*** A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. | | |
| **(PM RA2) Percentage of planned research outputs delivered to clients and partners for use in informing human health decisions.** | 100 | 100 |

| | | |
|---|---|---|
| ***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. Delivery of a research output means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. To ensure research products are responsive to partners' needs, ORD has a formalized process for developing and modifying program activities, including engagement with partners when making modifications. | | |
| **(PM RA8) Annual progress score for finalizing IRIS health assessments, Provisional Peer-Reviewed Toxicity Values, and Integrated Science Assessments.** | 5 | 5 |
| ***Additional Information:*** The annual score is based on the relative weighting of each chemical using a 3-tier system that includes client interest, complexity of science, and level of effort required. Points are scored by multiplying the weight of each assessment by the number of milestones completed in the assessment process. To support policy and regulatory decisions for EPA's programs and regions, as well as state, tribal, and local agencies, ORD aligns its resources with priority chemicals and product needs. In addition to the critical needs of Superfund, water, air, and children's health, ORD has sharpened its focus on the new TSCA law, and has been providing the needed scientific support to meet its expedited timelines. | | |
| **(PM SW1) Percentage of planned research products completed on time by the Safe and Sustainable Water Resources research program.** | 100 | 100 |
| ***Additional Information:*** A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products are needed to be transformed into the output. The actual product completion date is self-reported. | | |
| **(PM SW2) Percentage of planned research outputs delivered to clients and partners to improve the Agency's capability to ensure clean and adequate supplies of water that support human well-being and resilient aquatic ecosystems.** | 100 | 100 |
| ***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. Delivery of a research output means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. To ensure research products are responsive to partners' needs, ORD has a formalized process for developing and modifying program activities, including engagement with partners when making modifications. | | |
| **(PM RD2) Number of peer-reviewed journal articles with datasets cleared for publication.** | 336 | 336 |
| ***Additional Information:*** This measure tracks the progress towards EPA's efforts to increase public access to scientific data and publications. These journal articles are among the products of EPA research and scientific development and the publications, along with their underlying data, are peer reviewed and made publically available in accordance with ongoing open data efforts. | | |

## Objective 3.4 – Streamline and Modernize: Issue permits more quickly and modernize our permitting and reporting systems.

**Strategic Measure – By September 30, 2022, reach all permitting-related decisions within 6 months.**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM PE1) Percentage of permitting-related decisions issued within 6 months.** | No Target Established | TBD |
| ***Additional Information:*** EPA will improve the efficiency and effectiveness of federal permitting programs through several mechanisms, which include conducting a series of targeted Lean business process improvement events on EPA-issued permits and implementing the results of those events. EPA is scheduled to conduct the first round of Lean events for key permitting programs in January 2018. EPA will also collect system-wide data on permit status, backlog and throughput. Following the Lean events and other efforts, EPA will target and track improvements in permitting processes by gathering, analyzing and using agency-wide data to track results and collect best practices. In addition, EPA will systematically review and amend any internal policies and procedures related to permitting that could be streamlined, as appropriate, to further improve the efficiency and effectiveness of federal permitting programs. Permit decisions include approval or denial actions for a new, renewed or modified permit. Time to issue a permit (also known as lead time) is calculated from the date a permit application is received to the date of a permit issuance or denial action. The baseline and FY 2019 target will be determined in FY 2018. No target is established for FY 2018, but results will be reported. | | |

**Other Core Work supporting Objective 3.4.**

| Performance Measures | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM 052) Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.** | 85 | 90 |
| ***Additional Information:*** The Central Data Exchange (CDX) program began in FY 2001 to enable states, tribes and others to send environmental data to EPA through a centralized electronic process. The CDX program estimates its results as the net of new systems using CDX services (increase) and retirement of older systems that are being phased out (decrease). As a result, these results may increase or decrease in subsequent years. The unit of measure "system" is defined as the number of data flows/exchanges that occur through CDX by EPA program offices, states and tribes. There are 16 Vehicle Engine Regulation (VERIFY) data flows/exchanges that occur in CDX. Each serves a different need and is counted individually. Because CDX is used for these 16 unique needs, separate systems have not been developed to fulfill this need; rather, the one CDX solution serves them all. | | |
| **(PM 053) Number of states, tribes and territories able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.** | 110 | 115 |
| ***Additional Information:*** Users are defined for this measure as the total number of physical and virtual nodes in production and test. | | |
| **(PM 999) Number of active unique users from states, tribes, laboratories, regulated facilities and other entities that electronically report environmental data to EPA through CDX.** | 100,000 | 110,000 |

***Additional Information:*** To calculate unique users of the CDX system, CDX takes all users whose accounts have been active in the last two years and eliminates duplicate registrations under the same email address. Because many EPA regulations require periodic reporting, i.e., once every two, three or five years, a two-year span was utilized to capture the majority of users without overstating their "active" status.

## Objective 3.5 – Improve Efficiency and Effectiveness: Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

**Strategic Measure – By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet[21].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).** | 241,000 | 65,000 |
| ***Additional Information:*** This measure tracks usable square feet of office and warehouse space released with data collected from EPA facility manager notifications, and reports generated when there is a modification to an Occupancy Agreement. Space consolidation efforts will result in EPA becoming a more efficient and effective agency by reducing lease, utility, security and other facility management costs, which will enable the agency to direct resources to core environmental work. | | |

**Strategic Measure – By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT)[22].**

| Performance Measures that support this strategic measure | FY 2018 Target | FY 2019 Target |
|---|---|---|
| **(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.** | SA: 75%<br>CP: 65%<br>FAA: 80% | SA: 80%<br>CP: 70%<br>FAA: 85% |
| ***Additional Information:*** This measure tracks the timeliness of the agency's processing of contract actions for Simplified Acquisitions (SA), Competitive Proposals (CP), and Funding and Administrative Actions (FAA) with data collected from the EPA Acquisition System (EAS) and information from EPA contract officer representatives (CORs) and contract officers (COs). Timeliness is measured in processing days from the time the procurement request (PR) is released in EAS to the date the contract is awarded. PALT Standards are outlined in Section 7.1.1 of the EPA Acquisition Guide. As a result of these efforts, EPA will become a more efficient and effective agency by reducing processing time and costs. | | |
| **(PM PR2) Acquisition costs avoided through use of strategic sourcing.** | $3,000,000 | $4,000,000 |
| ***Additional Information:*** This measure tracks the agency's avoided acquisition costs through use of the strategic sourcing program (SSP) with data collected from EPA's spend-save tool. Avoided costs achieved by SSP contract vehicles result in EPA becoming a more efficient and effective agency by reducing expenditures, processing time and labor, which will enable the agency to direct resources to core environmental work. In FY 2017, EPA obligated $1.556 billion in contracts. | | |

[21] Baseline is 5,264,846 square feet as of FY 2017.

[22] Baseline for FY 2017 is under development.

| **Strategic Measure – By September 30, 2022, improve 250 operational processes.** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM OP1) Number of operational processes improved.** | 25 | 50 |
| ***Additional Information:*** EPA will apply Lean principles to improve the efficiency and cost effectiveness of its operations. An operational process is a sequence of activities that results in the delivery of a service. An operational process is counted as improved following a completed Lean/Kaizen event that meets a three-part test: (1) the work of the process has been standardized; (2) the Lean/Kaizen event is followed by accountability through the use of visual management; and (3) performance has improved. Targets are annual. | | |

| **Strategic Measure – By September 30, 2022, increase enterprise adoption of shared services by four[23].** | | |
|---|---|---|
| **Performance Measures that support this strategic measure** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM CF1) Number of administrative shared services.** | 6 | 7 |
| ***Additional Information:*** EPA will use additional federal and/or internal shared services when supported by business case analysis. Enterprise adoption of shared services will ensure consistency and scalability in tools and services, enabling the agency to standardize internal operational processes, control costs, and improve data quality. The five administrative shared services in place as of the end of FY 2017 were: IBC (HR/payroll), Concur (travel), Compass (core financial management), human resources shared service centers, and finance centers. This measure is cumulative. EPA is targeting the adoption of one additional shared service per year. | | |
| **(PM CF2) Number of agency administrative subsystems.** | 24 | 22 |
| ***Additional Information:*** Reducing the number of agency and Office of the Chief Financial Officer (OCFO) administrative system interfaces will allow EPA users to more easily input and access data and standardize reporting along with moving the payment processing to a federal shared service provider. This will have a positive impact on streamlining operational processes and drive the integration of financial transactions across multiple administrative systems; reducing manual entry and improving data quality. The focus is currently on establishing an integrated end-to-end delivery of financial transactions for contracts, grants, and interagency agreements into Compass. In FY 2017, the Agency had 26 administrative subsystems. | | |
| **(PM CF3) Average cost per payment transaction.** | $34.99 | $34.99 |
| ***Additional Information:*** Measuring the current financial payment processing and information technology system costs will allow EPA to monitor its progress toward the target of reducing the cost of contract and Simplified Acquisition Purchasing (SAP) transactions to the estimated cost level of an agency-wide shared service solution. Data are tracked in the Agency's Compass system. In FY 2017, the cost per payment transaction was $38.28. Various operational/process improvement efforts and IT system modernization project planning are underway to achieve cost reductions. | | |

[23] Baseline is 5 administrative systems/operations shared services in FY 2017.

| **Other Core Work supporting Objective 3.5.** | | |
|---|---|---|
| **Performance Measures** | **FY 2018 Target** | **FY 2019 Target** |
| **(PM 35A) Environmental and business actions taken for improved performance or risk reduction.** | 196 | 196 |
| ***Additional Information:*** This measure captures implemented corrective actions taken by the agency based on Office of the Inspector General (OIG) recommendations to improve EPA programs and/or processes. Results are typically from prior years and may fluctuate depending on the agency's ability to complete agreed-upon corrective actions. The target for this measure is developed by taking the actual performance for two or three fiscal years and adjusted to reflect any significant changes in priorities. | | |
| **(PM 35B) Environmental and business recommendations or risks identified for corrective action.** | 460 | 460 |
| ***Additional Information:*** This measure captures the number of OIG outputs (recommendations for improvement, outreach activities to plan and promote OIG work, congressional testimonies delivered, best practices identified, and risks identified). One key activity during an OIG audit/evaluation is identifying risks to EPA operations and programs. Risk identification is based on federal standards for internal control. Internal control is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable reporting, and compliance with laws, regulations and policies. Ultimately effective internal controls assure that operations run efficiently and effectively. The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities. | | |
| **(PM 35C) Return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations.** | 160 | 160 |
| ***Additional Information:*** Results under this measure identify the potential return on investment and do not include actual recoveries. The OIG's role is to question costs and identify cost efficiencies and funds put to better use (recommended efficiencies). The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities and removing reports from the average calculation with massive recommended efficiencies in excess of $200M. The reports excluded from the average are: FY2012-$372M; FY2014-$230M; FY2015-$571M; FY2016-$886M; and FY2017-$774M. | | |
| **(PM 35D) Criminal, civil, administrative, and fraud prevention actions.** | 87 | 75 |
| ***Additional Information:*** This measure captures criminal, civil, and administrative actions as a result of OIG investigations on fraud, waste and abuse. To a large extent, results are influenced by factors outside the control of OIG (judges, juries, etc.). | | |

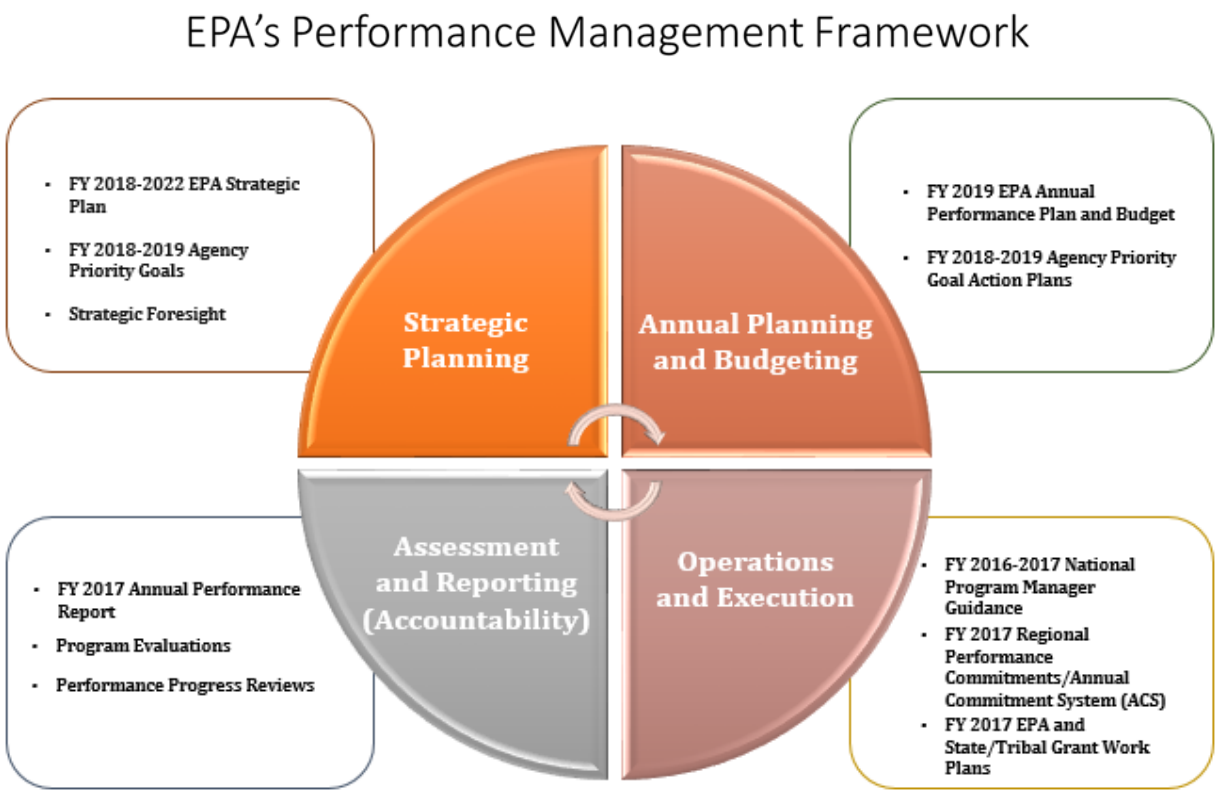
**Environmental Protection Agency**
**2019 Annual Performance Plan and Congressional Justification**

## Table of Contents – Program Performance and Assessment

## FY 2017 Annual Performance Report

### Introduction

EPA's *FY 2017 Annual Performance Report* (APR) presents the environmental and program performance results the Agency achieved in FY 2017 against the annual budget performance measures and targets established in its *FY 2017 Annual Performance Plan and Congressional Justification.* In compliance with requirements of the Government Performance and Results Act Modernization Act of 2010 (GPRAMA) and Office of Management and Budget implementing guidance, EPA's FY 2017 APR presents the last year of reporting progress toward the goals, strategic objectives, and cross-agency strategies established in the *FY 2014–2018 EPA Strategic Plan*. As illustrated in the performance management framework figure below, EPA analyzes annual performance results and progress toward longer-term strategic objectives, as an integral part of formulating and justifying Agency resource requests.




### Organization of the FY 2017 APR

This Program Performance and Assessment section (Tab 14) serves as the primary component of EPA's FY 2017 APR. Following this Introduction, it provides a detailed performance measure data table, which is organized by strategic goal along with associated strategic objectives and annual budget performance measures. The table summarizes long-term progress toward each strategic objective and presents results, explanations and additional information for annual budget

performance measures. Each strategic goal is introduced by a Goal-at-a-Glance overview, which provides high-level FY 2017 results and funding information. This section also includes a summary of progress longer term under EPA's cross-agency strategies.

Performance results from FY 2017 are also integrated in the *FY 2019 Annual Performance Plan and Congressional Justification* formulated under the new *FY 2018-2022 EPA Strategic Plan*.

Please also refer to EPA's *FY 2017 Agency Financial Report* (AFR) for information on financial performance results.

**Performance Management in FY 2017**

During FY 2017, EPA implemented a number of initiatives to further strengthen its performance management. Notable efforts included:

**Development of the *FY 2018-2022 EPA Strategic Plan*.** In FY 2017, EPA initiated development of its *FY 2018-2022 Strategic Plan* to set the Agency's direction for the next four years and advance the Administrator's priorities – refocusing the Agency on its core mission, restoring power to state and tribal partners through cooperative federalism, and leading the Agency through improved processes and toward its statutory obligations under the law. The *Plan* provides the foundation for greater efficiency and effectiveness, with the goal of accelerating progress in protecting human health and the environment. From a suite of 27 strategic measures highlighting areas in which the Agency wants to make the most progress, EPA has chosen nine for particular attention as the basis for six Agency Priority Goals – air quality attainment, Superfund and brownfields, Toxic Substances Control Act (TSCA) implementation, leveraging resources for infrastructure projects, streamlined permitting, and compliance with the law. EPA will issue its new *Strategic Plan* in final in February 2018.

**Completion of Enterprise Risk Assessments Under the *FY 2018-2022 EPA Strategic Plan*.** Following updates to OMB Circular A-123, EPA continues to integrate risk-based decision making into its planning, budgeting, and program management. In FY 2017, the Agency deployed a new risk assessment tool to engage senior leaders in evaluating risks to achieving the goals and objectives in the *FY 2018-2022 EPA Strategic Plan*. In FY 2017, senior leaders identified 114 risks, including 27 significant risks, with potential impacts on progress toward Agency strategic objectives. They then ranked the 27 significant risks and identified the top three enterprise risks. The Agency will develop strategies to mitigate the enterprise risks, and use risk information to inform annual planning and budget decisions.

**Second Year of the FY 2016-2017 National Program Manager (NPM) Guidance.** EPA completed the second year of the first 2-year NPM Guidance, advancing the approach developed by the joint NPM Guidance/National Environmental Performance Partnership System (NEPPS) Workgroup. The purpose of the two-year Guidance is to strengthen early, more meaningful state and tribal engagement, and increase flexibilities for EPA regions, states, and tribes while streamlining the workload associated with joint planning activities. The second year of work was guided by the *FY 2017 Exceptions-based Addendums to the FY 2016-2017 NPM Guidances*, which incorporated significant changes important to EPA, states, and tribes that were identified after release of the FY 2016-2017 NPM Guidance, using criteria developed in a workgroup by EPA and

the states. NPM Guidances and related material are publically available on EPA's NPM Guidances website (https://www.epa.gov/planandbudget/national-program-manager-guidances**).**

**Completed Implementation of FY 2016-2017 Agency Priority Goals (APGs).** APGs focus Agency attention on areas where leadership wants to accomplish near-term achievements or results. In FY 2017, EPA completed work on five FY 2016–2017 APGs developed in conjunction with the *FY 2014-2018 EPA Strategic Plan*. At the end of the two-year period culminating in FY 2017, the Agency achieved goals it set for two APGs, and achieved mixed results for the other three APGs, as described below.

- **Advance resilience in the nation's water infrastructure, while protecting public health and the environment, particularly in high-risk and vulnerable communities.** *By September 30, 2017, EPA will provide technical assistance and other tools to 75 urban communities to advance green infrastructure planning and implementation efforts to increase local climate resilience and water quality protections in stormwater infrastructure. EPA will also provide tools and training for 5000 operators of small water utilities to improve resilience in drinking water, wastewater, and stormwater systems. Trainings will be targeted based on regional threats, such as drought and flooding.*

  In FY 2016 and FY 2017, EPA provided technical assistance and tools to 125 urban communities to advance green infrastructure planning and implementation efforts, exceeding its target of 75. The Agency also provided tools and training to more than 10,700 small water utility operators and decision officials to improve resilience in drinking water, wastewater, and stormwater systems, greatly exceeding its cumulative target of 5,000.

- **Clean up contaminated sites to enhance the livability and economic vitality of communities.** *By September 30, 2017, an additional 18,600 sites will be made ready for anticipated use (RAU) protecting Americans' health and the environment, one community at a time***:**

  In FY 2016 and FY 2017, EPA delivered more than 19,000 sites ready for anticipated use, exceeding its target of 18,600. While the Brownfields, Superfund, and Resource Conservation and Recovery Act (RCRA) programs narrowly missed their cleanup targets, the Leaking Underground Storage Tanks (LUST) program contributed to the overall success in meeting the APG target.

- **Assess and reduce risks posed by chemicals and promote the use of safer chemicals in commerce.** *By September 30, 2017, the EPA will complete more than 3,400 assessments of pesticides and other commercially available chemicals to evaluate risks they may pose to human health and the environment***:**

  In FY 2016 and FY 2017, EPA completed more than 3,200 assessments of pesticides and other commercially available chemicals, slightly missing its target of 3,400. The Agency faced challenges in completing assessments of Toxic Substances Control Act (TSCA) New Chemicals Section 5 notices, and in processing the Pesticide Registration Improvement Act (PRIA) registrant submissions. The 2016 TSCA amendments made significant changes

to the new chemical review process and required re-review of approximately 300 submissions nearing completion when the law was enacted, delaying completions in many cases. In addition, the large number of new requirements and timelines for existing chemical risk evaluation established under the TSCA amendments, combined with lower numbers of TSCA Section 5 notices and PRIA registrant submissions than were expected, contributed to the missed target.

- **Strengthen environmental protection through business process improvements enabled by joint governance and technology.** *By September 30, 2017, reduce burden by one million hours, add five new functionalities to the E-Enterprise Portal, and begin development on two projects selected through E-Enterprise Leadership Council joint governance***:**

  EPA added over 20 new functionalities to the E-Enterprise Portal and saved stakeholders nearly 889,000 hours of burden through business process improvements. EPA fell slightly short of its target to reduce stakeholder burden by 1 million hours, as it was partially reliant on a modernization of the Safe Drinking Water Information System (SDWIS Prime) that could not be put into production before the end of FY 2017. However, deployment of SDWIS Prime in FY 2018 is estimated to save an additional 867,000 hours of burden per year in FY 2019 once full adoption and implementation are complete.

- **Reduce greenhouse gas emissions from cars and trucks.** *Through September 30, 2017, EPA, in coordination with Department of Transportation's fuel economy and fuel consumption standards programs, will implement vehicle and commercial truck greenhouse gas standards with a focus on industry compliance to ensure the significant reductions in greenhouse gases and oil consumption called for under the standards are realized. The light-duty and heavy-duty standards for model years 2012-2025 are projected to reduce greenhouse gas (GHG) emissions by more than 6.3 billion metric tons and reduce U.S. oil consumption by more than 12.5 billion barrels over the lifetime of the affected vehicles and commercial trucks.***:**

  All manufacturers are in compliance with existing GHG standards for model year 2016 and are also expected to be in compliance with existing GHG standards for model year 2017. Additionally, EPA completed 261 confirmatory tests in FY 2016 and FY 2017 to validate emissions data submitted by manufacturers for light-duty vehicles, surpassing its goal of 160-200 confirmatory tests (See: https://www.epa.gov/regulations-emissions-vehicles-and-engines/greenhouse-gas-ghg-emission-standards-light-duty-vehicles).

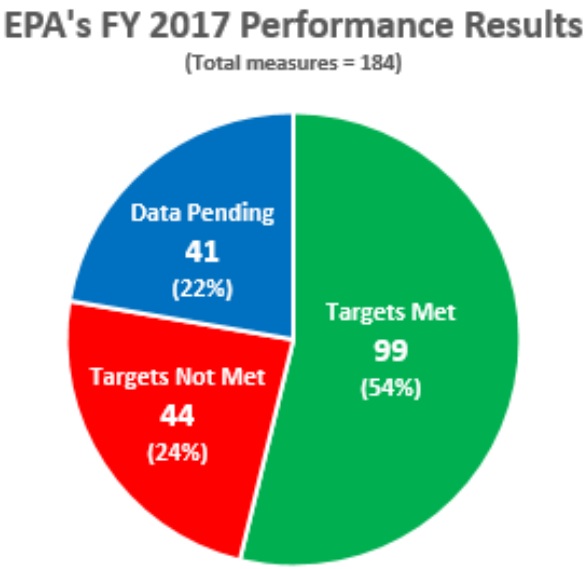
**Evidence and Evaluation**

Summaries of program evaluations completed during FY 2017 and other evidence use are available at https://www.epa.gov/planandbudget/results. Program evaluations and other evidence help provide the information EPA needs to ensure that its programs are meeting their intended outcomes. By assessing how well a program is working, a program evaluation can help EPA identify activities that benefit human health and the environment, provide the roadmap needed to replicate successes, and identify areas needing improvement. This is particularly important for fostering transparency and accountability.

## FY 2017 Performance Data

In the Agency's *FY 2017 Annual Performance Plan and Congressional Justification,* EPA committed to 184 annual performance measures/targets in support of the goals and objectives in the *FY 2014–2018 EPA Strategic Plan*. This *APR* describes the final year of progress toward that *Strategic Plan*. These performance measures/targets and EPA's results are presented in the detailed performance measure table following this introduction, along with explanations of results and additional information about these measures.

### *FY 2017 Performance Measure Results*




As of December 31, 2017, data are available for 143 of the 184 FY 2017 budget performance measures/targets.[1] Working with state and local governments, tribes, federal agencies, businesses, and industry leaders, the Agency met 99 of the performance measures, representing 69 percent of the performance measures for which data are currently available.

The Agency missed 44 of its FY 2017 performance measures/targets. As an integral part of its performance management process, EPA will continue to regularly review its performance, analyze results, and adjust FY 2018 and FY 2019 programmatic approaches and targets as appropriate.

Because final end-of-year data for some measures are not yet available, EPA is not able to report on 41 of its 184 performance measures. Often environmental results do not become apparent within a fiscal year, and assessment is a longer-term effort. Extensive quality assurance/quality control processes can also delay the reporting of performance data. EPA relies heavily on performance data obtained from state, tribal, and local agencies, all of which require time to collect and review for quality. Data lags may also result when reporting cycles do not correspond with the federal fiscal year on which this report is based, for example, data which are reported biennially. Additional FY 2017 results will be available in the Agency's FY 2018 *APR*, which will be included in the *FY 2020 Annual Performance Plan* and the "Program Performance and Assessment" section of the *FY 2020 Congressional Justification*.

[1] Of EPA's 184 FY 2017 performance measures, 25 measures fall under the Agency's enabling and support programs (including the Offices of Administration and Resources Management, Environmental Information, and Inspector General) and the Office of Research and Development. These measures are not reflected in the "Goal-at-a Glance" summaries which follow for each of EPA's five strategic goals.

***Previous Fiscal Year Data Now Available***

EPA can now report FY 2016 data that became available in FY 2017. In summary, final performance results became available for 23 of the 32 FY 2016 performance measures for which we lacked data at the end of FY 2016. Of these 23 performance measures, EPA met 16 and did not meet 7 of the Agency's targets. Data remain unavailable for 9 measures.[2]

**Verification/Validation of Performance Data**

The Agency develops Data Quality Records (DQRs) to present validation/verification information for selected performance measures and information systems, consistent with guidance from the Office of Management and Budget. A DQR documents the management controls, responsibilities, quality procedures, and other metadata associated with the data lifecycle for individual performance measures, and is intended to enhance the transparency, objectivity, and usefulness of the performance result. EPA's program offices choose the measures for which to develop DQRs, consistent with the Agency's goal to document quality procedures associated with a broad range of budget measures. Each DQR can be considered current as of the most recent date for which the Agency has published results for the performance measure. All of EPA's current DQRs are available in PDF format at the following URL: https://www.epa.gov/planandbudget/results.

Please note the PDF file may include DQRs that reference supporting documents, which are available upon request by sending an email with the name of the document and DQR to OCFOINFO@epa.gov. The email should indicate the measure number and text associated with the DQR, and the filename shown underneath the icon for the attachment.

[2] Performance Measure G02: Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the buildings sector; Performance Measure G16: Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the industry sector; Performance Measure SM1: Tons of materials and products offsetting use of virgin resources through sustainable materials management; Performance Measure J11: Reduction in moderate to severe exposure incidents associated with organophosphates and carbamate insecticides in the general population; Performance Measure 008: Percent of children (aged 1-5 years) with blood lead levels (>5 ug/dl); Performance Measure 10D: Percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old; Performance Measure D6A: Reduction in concentration of PFOA in serum in the general population; Performance Measure 012: Percent reduction of children's exposure to rodenticides; and Performance Measure 143: Percentage of agricultural acres treated with reduced-risk pesticides.

E. Scott Pruitt
Administrator

**Reliability of the EPA's Performance Data**

I attest to the reliability and completeness of the performance data presented in the U.S. Environmental Protection Agency's Fiscal Year 2017 Annual Performance Report. Because improvements in human health and the environment may not become immediately apparent, there might be delays between the actions we have taken and results we can measure. Additionally, we cannot provide results data for some of our performance measures for this reporting year. When possible, however, we have portrayed trend data to illustrate progress over time. We also report final performance results for previous years that became available in FY 2017.

E. Scott Pruitt
Administrator

FEB - 9 2018
Date

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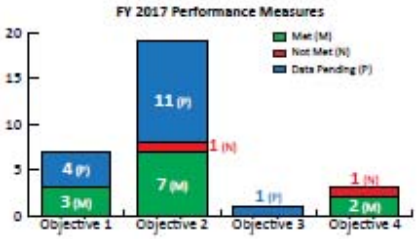
## Goal 1-5 Performance Array

# Goal 1 at a Glance

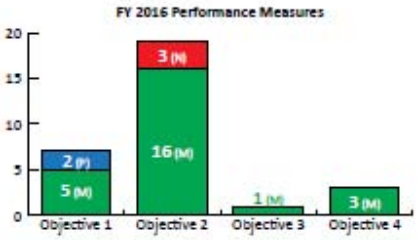
### ADDRESSING CLIMATE CHANGE AND IMPROVING AIR QUALITY

*Reduce greenhouse gas emissions and develop adaptation strategies to address climate change and protect and improve air quality.*

**FY 2017 Performance Measures**
Met: 12 Not Met: 2 Data Unavailable: 16
(Total Measures: 30)








| Strategic Objective Overview | FY 2016 Obligations* | % of Goal 1 Funds |
|---|---|---|
| **Objective 1.1: Address Climate Change.** Minimize the threats posed by climate change by reducing greenhouse gas emissions and taking actions that help to protect human health and help communities and ecosystems become more sustainable and resilient to the effects of climate change. | $213,042 | 19.5% |
| **Objective 1.2: Improve Air Quality.** Achieve and maintain health- and welfare-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants. | $822,242 | 75.4% |
| **Objective 1.3: Restore and Protect the Ozone Layer.** Restore and protect the Earth's stratospheric ozone layer and protect the public from harmful effects of ultraviolet radiation. | $17,001 | 1.6% |
| **Objective 1.4: Minimize Exposure to Radiation.** Minimize releases of radioactive material and be prepared to minimize exposure through response and recovery actions should unavoidable releases occur. | $38,875 | 3.5% |
| **Goal 1 Total** | **$1,091,160** | **100.0%** |

*All figures in thousands

## FY 2017 EPA Programs and Activities Contributing to Goal 1

Acid Rain Program
Air Toxics
Clean Air Allowance Trading Programs
Clean Air Research
Climate Partnership Programs
Indoor Air Quality and Radon Programs
Mobile Sources
National Ambient Air Quality Standards Development and Implementation
New Source Performance Standards
New Source Review
Radiation Protection and Emergency Response Programs
Regional Haze
Stratospheric Ozone Layer Protection Program

## GOAL 1: ADDRESSING CLIMATE CHANGE AND IMPROVING AIR QUALITY

Reduce greenhouse gas emissions and develop adaptation strategies to address climate change, and protect and improve air quality

**Objective 1 - Address Climate Change:** Minimize the threats posed by climate change by reducing greenhouse gas emissions and taking actions that help to protect human health and help communities and ecosystems become more sustainable and resilient to the effects of climate change.

**Summary of progress toward strategic objective:**

EPA made progress under this objective by developing greenhouse gas (GHG) programs to curb emissions and working with state and local agencies to permit larger industrial sources of GHG emissions. In addition, EPA built upon its successful partnerships in the consumer products, buildings, industry, homes, power, and transportation sectors. Performance highlights include:

- Through FY 2015, EPA worked with the consumer products, building, industrial, homes, power, and transportation sectors to avoid emissions of 994 million metric tons of carbon dioxide (CO2) equivalent of GHG reductions.
- EPA achieved its FY 2016-2017 Agency Priority Goal for GHG vehicle standards by completing the planned activities and milestones such as testing vehicles and issuing certificates of vehicle conformity.
- Annually, EPA published comprehensive GHG data from over 8,000 of the largest facilities and suppliers in the U.S., accounting for about half of total U.S. GHG emissions through EPA's GHG Reporting Program, providing data for policy, business, and regulatory decisions.

**Challenges:**

Overall, U.S. GHG emissions in FY 2015 were 11.5% below FY 2005 levels. This trend can be attributed to multiple factors, including year-to-year changes in weather and other changes in the electric power sector (See: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks). Through EPA-led efforts including the GHG Reporting Program and Clean Air Markets Program Data, EPA learned more about the sources and emissions of GHGs.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (1) Address Climate Change | **(PM G02) Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the buildings sector.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 168.7 | 182.6 | 196.2 | 188.0 | 201.1 | 210.4 | MMTCO2e |
| | **Actual** | 221.9 | 254.2 | 242.4 | 273.9 | Data Avail 12/2018 | Data Avail 12/2019 | |
| | ***Explanation of Results:*** GHG emissions reductions from EPA's buildings sector programs continue to exceed programmatic targets. | | | | | | | |
| | **(PM G06) Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the transportation sector through EPA's SmartWay partnership program.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 28.0 | 33.0 | 61 | 70 | 76 | 82 | MMTCO2e |
| | **Actual** | 38.9 | 51.6 | 61.7 | 72.8 | 84 | 92.1 | |

| Program Area | Performance Measures and Data |
|---|---|

***Explanation of Results:*** The results show that in FY 2017, SmartWay helped avoid 8.1 million metric tons of CO2 for a cumulative reduction of 92.1 MMTCO2E since program inception. The results reflect the efforts of partners to continuously improve the efficiency of their goods movement operations.

***Additional Information:*** SmartWay's emissions reductions are estimated by comparing the emissions performance of trucks in SmartWay with modeled estimates of national truck emissions, which is only one component of SmartWay. In 2004, there were 0.7 million metric tons of carbon dioxide equivalent reductions from the SmartWay program. From 2004 to 2014, EPA projected forward from the 2004 baseline assuming no impact on GHG emissions from U.S. climate change programs. Beginning in 2014, heavy-duty vehicles subject to the Phase 1 Greenhouse Gas rule began to gradually penetrate the national fleet, raising the emissions performance of the national fleet, and reducing the difference between the emissions performance of SmartWay truck carrier partners and the national fleet. Activities by SmartWay's rail, barge, and shipper partners are not captured in these estimates.

**(PM G16) Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the industry sector.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 372.9 | 421.9 | 461.8 | 540.3 | 676 | 702.7 | MMTCO2e |
| **Actual** | 378.1 | 637.9 | 669.3 | 653 | Data Avail 12/2018 | Data Avail 12/2019 | |

***Explanation of Results:*** GHG emissions reductions from EPA's industrial sector programs continue to exceed programmatic targets.

***Additional Information:*** Combined, energy, agriculture, waste, manufacturing and other industrial sectors generate more than a third of the nation's annual GHG emissions. Industrial sector emissions are produced either from a process itself, from the energy consumed during the process, or to produce electricity. EPA only reports results from those programs that are active in the reporting year.

**(PM G18) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | 93 | 95 | 95 | 95 | 95 | Percent |
| **Actual** | | 96 | 98 | 97 | 97 | 96 | |

***Additional Information:*** The GHG Reporting Program, established in 2009, has 41 sectors that include more than 8,000 facilities and suppliers. Both facilities and suppliers are required to report their data annually by March 31. After submission of the data, the Agency conducts a verification review that lasts approximately 150 days and includes a combination of electronic checks, staff review, and follow-up with facilities to identify any reporting errors and have them corrected before publication. The 150-day period includes 60 days for EPA to review reports and identify potential data quality issues, 75 days for reporters to resolve these issues, and 15 days for EPA to review responses or resubmitted reports. EPA typically publishes the data by October 1 each year (see: https://www.epa.gov/ghgreporting).

**(PM AD4) Cumulative number of state, tribal, and community partners that have integrated climate change data, models, information, and other decision-support tools developed by EPA for climate resiliency into their planning processes.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | | 50 | 120 | Number of Partners |
| **Actual** | | | | | 50 | Data Avail 12/2018 | |

***Additional Information:*** A key goal of EPA's work on climate resiliency is to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare, and adapt to a changing climate. This measure focuses on providing the tools, training, technical assistance, data, models, and other information they need to build their adaptive capacity.

**(PM AD5) Cumulative number of state, tribal, and community partners that have incorporated climate resiliency into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | | 50 | 100 | Number of Partners |
| **Actual** | | | | | 50 | Data Avail 12/2018 | |

***Additional Information:*** This measure focuses on supporting climate-resilient investments across the nation.

**(PM AD6) Cumulative number of EPA-developed training programs that incorporate climate resiliency planning for EPA staff, state, tribal, and community partners (includes programmatic and cross-programmatic trainings).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | | 3 | 4 | Number |
| **Actual** | | | | | 5 | 5 | |

***Explanation of Results:*** EPA has completed the following training modules: (1) Introductory Climate Adaptation Training for EPA staff; (2) Office of Land and Emergency Management Climate Change Adaptation Training for EPA staff; (3) Climate Adaptation Training for Local Governments; (4) Training on Understanding Climate Change Impacts on Water Resources; and (5) Office of Land and Emergency Management Climate Change Adaptation Training for the public.

**Objective 2 - Improve Air Quality:** Achieve and maintain health- and welfare-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants.

**Summary of progress toward strategic objective:**

Under this objective EPA, together with its implementation partners, made progress to improve air quality by designing, developing, and implementing national programs that delivered significant reductions in harmful air pollutants. These actions include setting health-based ambient air quality standards grounded in scientific research, and setting fuel and engine standards that improve air quality in communities across the United States. Performance highlights include:

- National ambient concentrations of criteria pollutants continued to show steady improvement. From FY 2003 to FY 2016, for example, population-weighted ambient concentrations of fine particulate matter (PM2.5) and ozone decreased 37% and 20%, respectively. In addition, the number of days when the ozone standard was exceeded in nonattainment areas and the number of days when the Air Quality Index is considered to be unhealthy for sensitive groups of people is trending downward. Cleaner air prevents tens of thousands of premature deaths, reduces heart attacks and hospital visits, alleviates hundreds of thousands of asthma attacks among children and sensitive populations, and prevents millions of lost school and work days. (See: https://www.epa.gov/air-trends)
- EPA's Acid Rain and Cross-State Air Pollution Rule (CSAPR) programs continued to make significant progress in reducing emissions from applicable sources. Under these two programs, in 2016, SO2 emissions fell by 33% from 2015 levels, from 2.2 to 1.5 million tons, and annual NOX emissions fell 13%, from 1.4 to 1.2 million tons. Ozone season NOX emissions fell 10% from 2015 levels, from 0.62 million tons to 0.55 million tons. (See: https://www.epa.gov/airmarkets/clean-air-markets-progress)
- EPA is making steady progress to fulfill its commitment to clear the existing State Implementation Plan (SIP) backlog as of October 1, 2013 and manage the timely review of all other SIPs consistent with Clean Air Act deadlines by working closely with state and local air agencies. In FY 2017, EPA took action on 385 SIPs, 211 of which were in the backlog.
- EPA equipped health, housing, environmental and health insurance programs to effectively support delivery, infrastructure and sustainable financing of environmental asthma interventions in homes and schools. The results reflect a combination of EPA supported technical training and Non-Governmental Organization partnerships. (See: https://www.epa.gov/asthma)

**Challenges:**

Priorities must be balanced to ensure progress on statutorily required work and court ordered deadlines. Many state, local, and tribal air agencies are finding it more and more challenging to deliver environmental and public health protection.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (1) Reduce Criteria Pollutants and Regional Haze | (PM M9) Cumulative percentage reduction in population-weighted ambient concentration of ozone in monitored counties from 2003 baseline. | | | | | | | |
| | | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
| | Target | 13 | 15 | 16 | 16 | 17 | 19 | Percent Reduction |
| | Actual | 13 | 15 | 18 | 21 | 20 | Data Avail 12/2018 | |

<table>
<tr><th>Program Area</th><th>Performance Measures and Data</th></tr>
<tr><td></td><td>
Explanation of Results: The FY 2016 results show national ozone concentrations have decreased at a rate consistent with the estimated impacts of existing and future control strategies, continuing the trend of long-term improvement. The actual changes in this metric can vary from one year to the next because meteorology plays a significant role in ozone formation.
Additional Information: This measure shows progress in reducing ambient ozone concentrations from the 2003 baseline (population-weighted national average of 0.090 ppm). Consistent with the National Ambient Air Quality Standard (NAAQS) for ozone, it is based on a three-year average concentration. The measure assigns more weight to counties with more people by weighting each county's ozone concentration by its population. The targets for this measure are based on predictions of future year concentrations resulting from the Community Multi-Scale Air Quality model which estimates the impact of existing and future control strategies. The actuals are updated annually based on the actual monitored ozone concentrations.
(PM M92) Cumulative percentage reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>50</td><td>80</td><td>80</td><td>80</td><td>81</td><td>83</td><td rowspan="2">Percent Reduction</td></tr>
<tr><td>Actual</td><td>73</td><td>74</td><td>79</td><td>82</td><td>82</td><td>Data Avail 12/2018</td></tr>
</table>
Explanation of Results: The FY 2016 results are largely driven by national ozone and PM 2.5 concentrations which have decreased at a rate consistent with the estimated impacts of existing and future control strategies, continuing the trend of long-term improvement. The actual changes in this measure can vary from one year to the next because meteorology plays a significant role in ozone and PM 2.5 formation.
Additional Information: This measure shows progress in reducing the number of "unhealthy" air quality days based on the Air Quality Index (AQI) relative to the 2003 baseline. The AQI is an index for reporting daily air quality. An AQI value of 100 generally corresponds to the NAAQS for each of the five pollutants included in the index. When AQI values are above 100, air quality is considered to be unhealthy for certain sensitive groups of people and then for everyone as AQI values get higher. This measure assigns more weight to higher AQI values and counties with more people. Because ozone and PM2.5 typically account for the vast majority of AQI values above 100, this measure largely tracks changes in those two pollutants. The targets for this measure are based on a regression curve using historical data. The actuals are updated annually based on the actual monitored concentrations.
(PM MM9) Cumulative percentage reduction in the average number of days during the ozone season that the ozone standard is exceeded in non-attainment areas, weighted by population.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>45</td><td>50</td><td>50</td><td>50</td><td>68</td><td>70</td><td rowspan="2">Percent Reduction</td></tr>
<tr><td>Actual</td><td>54</td><td>59</td><td>67</td><td>76</td><td>75</td><td>Data Avail 12/2018</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Program Area</th><th>Performance Measures and Data</th></tr>
<tr><td></td><td>
Explanation of Results: The FY 2016 results show national ozone concentrations have decreased at a rate consistent with the estimated impacts of existing and future control strategies, continuing the trend of long-term improvement. The actual changes in this measure can vary from one year to the next because meteorology plays a significant role in ozone formation.
Additional Information: This measure shows progress in reducing the number of exceedance days in the 1997 ozone nonattainment areas relative to the 2003 baseline. Consistent with the NAAQS for ozone, it is based on a three-year average. The measure assigns more weight to nonattainment areas with more people by weighting each nonattainment area’s exceedance count by its population. The targets for this measure are based on a regression curve using historical data. The actuals are updated annually based on the actual monitored concentrations.
(PM N35) Limit the increase of Carbon Monoxide (CO) emissions from mobile sources compared to a 2000 baseline.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>2.02</td><td>2.19</td><td>2.36</td><td>2.53</td><td>2.70</td><td>2.87</td><td rowspan="2">Million Tons Emitted</td></tr>
<tr><td>Actual</td><td>2.02</td><td>2.19</td><td>2.36</td><td>2.53</td><td>2.70</td><td>2.87</td></tr>
</table>
Explanation of Results: This measure is an indicator of estimated reductions with alignment between target and actuals.
Additional Information: As of 2010, the few areas in the U.S. that had active issues with local levels of CO had controlled their levels to or below EPA’s NAAQS for CO. These areas have all been re-designated to attainment with a CAA maintenance plan (i.e., known as “maintenance areas”). In 2000, CO emissions from mobile sources were 79.2 million tons using the 2000 Mobile6 inventory.
(PM O33) Cumulative millions of tons of Volatile Organic Compounds (VOCs) reduced since 2000 from mobile sources.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>2.05</td><td>2.23</td><td>2.4</td><td>2.57</td><td>2.74</td><td>2.91</td><td rowspan="2">Million Tons Reduced</td></tr>
<tr><td>Actual</td><td>2.05</td><td>2.23</td><td>2.4</td><td>2.57</td><td>2.74</td><td>2.91</td></tr>
</table>
Explanation of Results: This measure is an indicator of estimated reductions with alignment between target and actuals.
Additional Information: Volatile organic compounds (VOCs) react in the atmosphere to form ozone and particulate matter, both of which are criteria pollutants for which EPA establishes NAAQS. In addition, some VOCs are air toxics (such as benzene) or react in the atmosphere to form ozone and particulate matter, both of which are criteria pollutants for which EPA establishes NAAQS. Reducing VOC emissions from mobile sources reduces the atmospheric concentrations and resulting health and environmental effects of these pollutants. EPA has reduced VOC emissions from mobile sources through its emissions standards promulgated since 2000 which apply to mobile sources including on-road cars and trucks, nonroad engines and equipment (such as lawn and garden equipment), locomotives, and marine engines. VOC emissions will continue to fall over time as new, cleaner vehicles and engines enter the fleet. In 2000, VOCs emissions from mobile sources were 7.7 million tons using the 2000 Mobile6 inventory.
</td></tr>
</table>

**(PM O34) Cumulative millions of tons of Nitrogen Oxides (NOx) reduced since 2000 from mobile sources.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 4.07 | 4.41 | 4.74 | 5.08 | 5.42 | 5.76 | Million Tons Reduced |
| **Actual** | 4.07 | 4.41 | 4.74 | 5.08 | 5.42 | 5.76 | |

***Explanation of Results:*** This measure is an indicator of estimated reductions with alignment between target and actuals.

***Additional Information:*** Nitrogen oxides (NOx) react in the atmosphere to form ozone, particulate matter, and NO2, all of which are criteria pollutants for which EPA establishes NAAQS. Reducing NOx emissions from mobile sources reduces the atmospheric concentrations and resulting health and environmental effects of these pollutants as well as the ecosystem effects associated with nitrogen deposition to water bodies. EPA, in cooperation with its partners and manufacturers, has reduced NOx emissions from mobile sources including on-road cars and trucks, nonroad engines and equipment (such as construction, farming, and lawn and garden equipment), locomotives, aircraft, and marine vessels. NOx emissions will continue to fall over time as new, cleaner vehicles and engines enter the fleet. In 2000, NOx emissions from mobile sources were 11.8 million tons using the 2000 Mobile6 inventory.

**(PM M91) Cumulative percentage reduction in population-weighted ambient concentration of fine particulate matter (PM-2.5) in all monitored counties from 2003 baseline.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 16 | 20 | 28 | 29 | 31 | 32 | Percent Reduction |
| **Actual** | 26 | 29 | 29 | 32 | 37 | Data Avail 12/2018 | |

***Explanation of Results:*** The FY 2016 results show national PM 2.5 concentrations have decreased at a rate consistent with the estimated impacts of existing and future control strategies, continuing the trend of long-term improvement. The actual changes in results can vary from one year to the next because meteorology plays a significant role in PM 2.5 formation.

***Additional Information:*** This measure shows progress in reducing ambient PM 2.5 concentrations with respect to the 2003 baseline (population-weighted national average of 14.1 ug/m3). Consistent with the NAAQS for PM 2.5, it is based on a three-year average concentration. Reducing emissions of PM 2.5 results in decreases in atmospheric concentrations of inhalable fine particles, which in turn lowers the risk of premature mortality, hospital admissions for heart and lung disease, and respiratory symptoms. The measure assigns more weight to counties with more people by weighting each county's PM 2.5 concentration by its population. The targets for this measure are based on predictions of future year concentrations resulting from the Community Multi-Scale Air Quality model which estimates the impact of existing and future control strategies. The actuals are updated annually based on the actual monitored concentrations.

**(PM P34) Cumulative tons of PM-2.5 reduced since 2000 from mobile sources.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 146,921 | 159,164 | 171,407 | 183,651 | 195,895 | 208,138 | Tons Reduced |
| **Actual** | 146,921 | 159,164 | 171,407 | 183,651 | 195,895 | 208,138 | |

***Explanation of Results:*** This measure is an indicator of estimated reductions with alignment between target and actuals.

***Additional Information:*** EPA, in cooperation with its partners and manufacturers, has reduced PM 2.5 emissions from mobile sources including on-road cars and trucks, nonroad engines and equipment (such as construction and farming equipment), locomotives, and marine vessels. PM 2.5 emissions will continue to fall over time as the new, cleaner vehicles and engines enter the fleet. In 2000, PM 2.5 emissions from mobile sources were 510,550 tons using the 2000 Mobile6 inventory.

**(PM A01) Annual emissions of sulfur dioxide (SO2) from electric power generation sources.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 6,000,000 | 6,000,000 | 6,000,000 | 6,000,000 | 5,000,000 | 5,000,000 | Tons Emitted |
| **Actual** | 3,319,000 | 3,210,365 | 3,122,921 | 2,231,970 | 1,487,542 | Data Avail 04/2018 | |

***Explanation of Results:*** Actual emissions have consistently been lower than the targets due to a number of factors including use of the large and growing bank of acid rain program allowances and uncertainty regarding market dynamics related to the mix of fuels and power generation sources in the future.

***Additional Information:*** The baseline in 1980 is 17.4 million tons of SO2 emissions from electric utility sources. This inventory was developed by the National Acid Precipitation Assessment Program (NAPAP) and is used as the basis for reduction in Title IV of the 1990 Clean Air Act (CAA) Amendments. Statutory SO2 emissions capped in 2010 at 8.95 million tons, approximately 8.5 million tons below 1980 emissions level. Targets for this measure through 2010 were based on implementation of the nationwide Acid Rain Program (ARP) alone whereas the (lower) target of 6 million tons for FYs 2011-2015 recognized implementation of the Clean Air Interstate Rule (CAIR) Programs in eastern states in combination with ARP. The updated FY 2016 and 2017 targets are based on the ARP and newly established SO2 budgets under the Cross State Air Pollution Rule (CSAPR), which began implementation in January 2015. The FY 2016 and FY 2017 targets incorporate the following assumptions: 1) CSAPR states emit at the full assurance provision level allowed under the rule; 2) sources in non-CSAPR states would continue to emit at historical levels; and 3) potential use of banked ARP allowances.

**(PM MM6) Total number of backlogged SIPs remaining.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | No Target | No Target | No Target | 300-400 | 100-200 | Number of Backlogged SIPs |
| **Actual** | | 699 | 649 | 557 | 322 | 360 | |

***Explanation of Results:*** In FY 2017, EPA took action on 385 SIPs, 211 of which were backlogged. A new SIP-focused IT system currently under development is expected to improve SIP processing efficiency in FY 2018 and beyond.

***Additional Information:*** The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans (SIPs), are developed by state and local air quality management agencies and submitted to EPA for approval. SIPs vary in their complexity with more complex SIPs requiring more effort from EPA to act on them. Each year EPA identifies the baseline of total active SIPs, current and backlogged, and considers a range of anticipated incoming SIPs for that year. EPA then estimates the total number of SIP actions it will take in the upcoming year. The SIP baseline changes year to year depending on actions taken in the prior year. The estimated number of actions will also vary year to year depending on the status of EPA rulemakings, state priorities for which SIPs they want acted on, and potential new SIPs or SIP revisions. Targets are presented as a range to reflect this variability.

**(PM MM7) Cumulative Percent of State Implementation Plans (SIPs) removed from the historical backlog.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | 0 | 20 | 40 | 60 | 84 | Cumulative Percentage Removed |
| **Actual** | | 0 | 25 | 48 | 65 | 93 | |

***Explanation of Results:*** In FY 2017, EPA took action on 385 SIPs, 211 of which were backlogged. A new SIP-focused IT system currently under development is expected to improve EPA review and tracking of SIP submittals and EPA action on SIPs in FY 2018 and beyond. EPA will continue to receive new SIPs such as 2015 ozone NAAQS infrastructure SIPs, ozone attainment plans, and SO2 attainment plans. In addition, a portion of the submittals remaining in the backlog have particularly complex policy, technical and legal issues which contributes to the time it takes EPA to develop an approvable and defensible action on those submittals.

***Additional Information:*** The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. SIPs are developed by state and local air quality management agencies and submitted to EPA for approval. SIPs vary in their complexity with more complex SIPs requiring more effort from EPA to act on them. Each year through regional SIP Management Plans, EPA identifies the baseline of total active SIPs, current and backlogged, and considers a range of anticipated incoming SIPs for that year. EPA then estimates the total number of SIP actions it will take in the upcoming year. The SIP baseline changes year to year depending on actions taken in the prior year and the number of incoming SIPs. The estimated number of actions will also vary year to year depending on the status of EPA rulemakings, state priorities for which SIPs they want acted on, and the complexity of the priority SIPs. Targets are presented as a range to reflect this variability.

**(PM M94) Percent of major NSR permits issued within one year of receiving a complete permit application.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 78 | 78 | 78 | 78 | 78 | 78 | Percent |
| **Actual** | 80 | 90 | 59 | 80 | 87 | Data Avail 04/2018 | |

***Explanation of Results:*** Most of the completed permit applications involved activities that could be addressed within the one year timeframe. Only the most complicated permits took longer than one year to issue. Permitting authorities (state and local air agencies) continue to issue timely permits.

***Additional Information:*** New Source Review (NSR) requires stationary sources to obtain permits before they start construction. NSR permits are usually issued by state or local air pollution control agencies; EPA issues permits in some cases (such as in Indian country). States that issue permits are not required by law to report all major source permitting actions to an EPA administered database. EPA calculates the annual percentage based only on the states that choose to report and occasionally the state reports lag by 12 months or more from the end of each reporting year. This measure shows progress against the CAA requirement that NSR prevention of significant deterioration (PSD) permits are issued within one year of determination of complete application.

**(PM M95) Percent of significant Title V operating permit revisions issued within 18 months of receiving a complete permit application.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 88 | 88 | 88 | 88 | Percent |
| **Actual** | 86 | 91 | 91 | 88 | 93 | Data Avail 12/2018 | |

***Explanation of Results:*** Most significant revisions to Title V permits are less complex than newly issued permits because revisions address only a subset of applicable requirements. Performance for this measure has historically been in the 80-90% range with only the most difficult of significant Title V permit revisions taking longer than 18 months to issue.

***Additional Information:*** Stationary Source operating permits issued under Title V of the CAA are legally enforceable documents that permitting authorities issue to air pollution sources after the source has begun to operate and must be renewed every five years. Title V permits are usually issued by state or local air pollution control agencies; EPA issues the permit in some cases (such as in Indian country). Additionally, when a source (or facility) undergoes a major or "significant" revision to its operations that affects emissions, a revision to the Title V operating permit must be sent to the permitting agency for review. This measures tracks timeliness of significant permit revision issuance within 18 months.

**(PM M96) Percent of new Title V operating permits issued within 18 months of receiving a complete permit application.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 99 | 99 | 75 | 75 | 75 | 75 | Percent |
| **Actual** | 76 | 60 | 59 | 67 | 61 | Data Avail 12/2018 | |

***Explanation of Results:*** The FY 2016 target was not met. The majority of Title V permits are issued by state air agencies and it is difficult to estimate targets for state work. The variation in actual performance is partly attributable to the increasing complexity of permits.

***Additional Information:*** Operating permits are legally enforceable documents that permitting authorities issue to air pollution sources after the source has begun to operate. Usually, Title V permits are issued by state or local air pollution control agencies; EPA issues the permit in limited cases. Title V permits must be renewed every five years. When a new source (or facility) begins operations and has the potential to emit air pollution beyond a certain threshold, a new Title V operating permit must be sent to the permitting agency for review.

**(2) Reduce Air Toxics**

**(PM 001) Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 37 | 42 | 42 | 42 | 41 | 41 | Percent Reduction |
| **Actual** | 45 | 45 | 40 | 40 | 40 | Data Avail 12/2020 | |

***Explanation of Results:*** The FY 2014-2016 results are slightly below their target. The increases in toxicity weighted (for cancer risk) emissions over the FY 2011-2014 values are largely attributable to a change in the toxicity (nearly 60 times more potent) for ethylene oxide based on a new Integrated Risk Information System (IRIS) value released in December 2016. The non-weighted total air toxic emissions continue to decrease. In 2011, the National Emissions Inventory (NEI) showed a reduction from 1990 emissions of 61% and in 2014, the emissions are down 66% from 1990 levels.

***Additional Information:*** The toxicity-weighted emission inventory utilizes the NEI for air toxics along with EPA's compendium of cancer and non-cancer health risk criteria to develop a risk metric that can be tabulated on an annual basis. Air toxics emissions data are revised every three years. The out-year targets are based on expected emissions derived from the 2011 NEI inventory and adjusted for expected air toxic reductions from proposed or anticipated national air toxic rules. Targets also incorporate population and industry growth estimates, which result in increased air toxic emissions over time. Further, targets are also adjusted based on health benchmark changes resulting from updated science.

**(PM 002) Cumulative percentage reduction in tons of toxicity-weighted (for non-cancer risk) emissions of air toxics from 1993 baseline.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 59 | 59 | 59 | 58 | 57 | 57 | Percent Reduction |
| **Actual** | 55 | 55 | 51 | 51 | 51 | Data Avail 12/2020 | |

***Explanation of Results:*** The FY 2014-2016 results are below their target. The increases in toxicity weighted (for non-cancer risk) emissions over the FY 2011-2014 values primarily pertain to changes to emissions factors for nonroad mobile sources leading to increased acrolein emissions. The non-weighted total air toxic emissions continue to decrease. In 2011, the NEI showed a reduction from 1990 emissions of 61% and in 2014, the emissions are down 66% from 1990 levels.

***Additional Information:*** The toxicity-weighted emission inventory utilizes the NEI for air toxics along with EPA's compendium of cancer and non-cancer health risk criteria to develop a risk metric that can be tabulated on an annual basis. Air toxics emissions data are revised every three years. The out-year targets are based on expected emissions estimates derived from the 2011 NEI inventory and adjusted for expected air toxic reductions from proposed or anticipated national air toxic rules. Targets also incorporate population and industry growth estimates, which result in increased air toxic emissions over time. Further, targets are also adjusted based on health benchmark changes resulting from updated science.

**(4) Reduce Exposure to Indoor Air Pollutants**

**(PM R50) Percentage of existing homes with an operating radon mitigation system compared to the estimated number of homes at or above EPA's 4pCi/L action level.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 13.3 | 13.9 | 13.9 | 14.9 | 14.9 | 14.9 | Percent |
| **Actual** | 14.1 | 15 | 15.9 | 16.9 | 17.4 | 18.2 | |

***Explanation of Results:*** Prior to FY 2014, results derived from voluntary reporting of mitigation fan sale data by the radon fan manufacturing industry that is no longer available. FY 2014-2017 results are estimated using historical mitigation fan sale data and trends in the housing market.

***Additional Information:*** Radon is the leading cause of lung cancer in nonsmokers and the second leading cause overall (smokers and nonsmokers). About one in 15 U.S. homes have radon above EPA's action level.

**(PM R51) Percentage of all new single-family homes (SFH) in high radon potential areas built with radon reducing features.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 36.0 | 37.5 | 37.5 | 40.5 | 40.5 | 40.5 | Percent |
| **Actual** | 44.6 | 38.9 | 44.1 | 42.4 | 49 | Data Avail 10/2018 | |

***Explanation of Results:*** Results are derived from the Home Innovation Research Lab's Annual Builder Practices Survey. This measure shows that the percentage of homes being built in radon areas with radon-resistant features has been relatively steady and consistently exceeded EPA projections. The results were achieved through progress by leading state programs; increased action on radon, through the National Radon Action Plan expanded from the Federal Radon Action Plan; and through an increased awareness and interest in healthy homes.

***Additional Information:*** Radon is the leading cause of lung cancer in nonsmokers and 2nd leading cause overall (smokers and nonsmokers). Areas with the highest radon potential (Zone 1 on EPA radon map) have a predicted average indoor radon screening level greater than 4 pCi/L.

**(PM R19) Cumulative number of programs supporting the delivery, infrastructure, and sustainable financing of environmental asthma interventions at home and school.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | | 300 | 600 | Programs |
| **Actual** | | | | | 563 | 884 | |

| | |
|---|---|
| | ***Explanation of Results:*** The results reflect a combination of EPA supported technical training (e.g., webinars, stakeholder training events, etc.) and funded NGO partnerships (focused on tribes, school-based health centers, health insurance plans, and states).<br><br>***Additional Information:*** The FY 2015 baseline for this new initiative is zero. Through this effort, EPA is equipping health, housing, environmental, and health insurance programs to support delivery, infrastructure and sustainable financing of environmental asthma interventions at home and school. Environmental pollutants in homes can cause and exacerbate asthma. Further evidence indicates that investment in home interventions will improve health outcomes and reduce and/or shift health care costs from medical treatment to secondary prevention. |

**Objective 3 - Restore and Protect the Ozone Layer:** Restore and protect the earth's stratospheric ozone layer and protect the public from the harmful effects of ultraviolet (UV) radiation.

**Summary of progress toward strategic objective:**

EPA made progress under this objective through domestic commitments and leadership in international efforts to restore and protect the ozone layer. The natural layer of ozone in the stratosphere shields and protects the Earth's surface from the sun's harmful ultraviolet (UV) rays, which can lead to more cases of skin cancer, cataracts and other health problems. Stratospheric ozone depletion is the result of a complex set of circumstances and chemistry. All nations recognized by the United Nations have ratified the Montreal Protocol and continue to phase out the production of chemicals that deplete the ozone layer while transitioning to ozone-friendly alternatives.

In FY 2016, hydrochlorofluorocarbons (HCFCs) consumption (production and import) were well below levels required by the Montreal Protocol, showing that the U.S. continues to outperform international commitments and is on track to meet future obligations. Under the Montreal Protocol and the Clean Air Act, total U.S. HCFC production and consumption is capped, and will be completely phased out by 2030. The results are achieved primarily through EPA rulemakings that establish limits on the amount of HCFCs that can be produced and imported in a given year. Additionally, reviewing and listing alternatives for HCFCs under the Significant New Alternatives Policy (SNAP) program, as well as regulations establishing refrigerant management, labeling, and other requirements, have supported this transition. Importantly, industry innovation in developing new alternatives to meet the needs of consumers and industry sectors continues to be critical as the U.S. adopts and promotes these new alternatives in the transition from ozone-depleting substances (ODS).

**Challenges:**

Implementing an allocation plan that both supports a steady phase out of ODS and meets the needs of a diverse group of stakeholders is complex and continues to pose challenges. As the amount of ODS produced declines, the demands for flexibility and specific, tailored solutions to unique situations grow. EPA manages ongoing exemption programs to allow low-quantity continued production of ODS in areas of critical need.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (1) Reduce Consumption of Ozone-Depleting Substances | **(PM S01) Remaining US Consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, measured in tons of Ozone Depleting Potential (ODP).** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | <3,700 | <3,700 | <3,700 | <1,520 | <1,520 | <1,520 | ODP Tons |
| | **Actual** | 1,450 | 1,640 | 1,374 | 584 | 486 | Data Avail 12/2018 | |

| Program Area | Performance Measures and Data |
|---|---|
| | ***Explanation of Results:*** FY 2016 results show that the U.S. continues to outperform international commitments under the Montreal Protocol, and is on track to meet future obligations. The results are achieved primarily through limits achieved by EPA in cooperation with industry on the amount of HCFCs that can be produced and imported in a given calendar year. Additionally, actions reviewing and listing alternatives for HCFCs under EPA's SNAP, as well as regulations establishing refrigerant management, labeling, and other requirements, have supported this transition. Additionally, industry innovation in developing new alternatives to meet the needs of consumers and industry sectors continue to be critical as the U.S. adopts and promotes these new alternatives in the transition from ODS.<br><br>***Additional Information:*** The base of comparison for assessing progress is the domestic consumption cap of Class II HCFCs as set by the Parties to the Montreal Protocol. Each ODS is weighted based on the damage it does to the stratospheric ozone - this is, its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8% of the domestic ODP-weighted consumption of chlorofluorocarbons (CFCs) in 1989 plus the ODP-weighted level of HCFCs in 1989 (a total of 15,240 tons). Consumption equals production plus import minus export. |

**Objective 4 - Minimize Exposure to Radiation:** Minimize releases of radioactive material and be prepared to minimize exposure through response and recovery actions should unavoidable releases occur.

**Summary of progress toward strategic objective:**

EPA made progress under this objective by maintaining a high level of readiness to support federal radiological emergency response and recovery operations. In addition, EPA's regulatory and non-regulatory activities supported our mission to protect human health and the environment by minimizing unnecessary exposures to radiation, including operating and maintaining RadNet and developing protective rules and guidance documents. Performance highlights include:

- EPA continued to demonstrate a high level of radiological emergency response readiness, scoring 96% in FY 2017 for the level of readiness.
- EPA made improvements to RadNet that increased the number of air monitors installed from 135 to 139 and increased the average percentage of operational monitors from 80% in March 2011 to over 90% in FY 2017 (monitors are taken down and brought back up for maintenance and/or repair on a routine basis). EPA also deployed dose rate meters on more than 20% of the RadNet monitors. Improvements in data processing, review, and quality assurance processes have reduced the time that data are in the review process and are thus available for release during emergencies in less time.

**Challenges:**

Maintaining scientific, technical, and policy expertise in the radiation field continues to be a challenge across the federal government and in organizations requiring this specialized expertise. Unlike many other science, technology, and mathematics fields that are growing, health physics is a unique field of expertise that was born in the Atomic Age in the 1940s. As that original workforce ages, the nation is experiencing a shortage of professionals in the field of radiation protection, nuclear power, and radiobiology.

Responding to radiation incidents is complex and requires coordination of assets across all levels of government. EPA has built working relationships in the National Response Framework (NRF), which provides context for how the response community works together and how response efforts relate to other parts of national preparedness.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **(1) Prepare for Radiological Emergencies** | **(PM R35) Level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 90 | 90 | 93 | 93 | 93 | 93 | Percent |
| | **Actual** | 92 | 99 | 94 | 93 | 95 | 96 | |
| | ***Explanation of Results:*** The Core National Approach to Response (NAR) process currently measures select aspects of EPA's radiological emergency response program and shows a continued high radiological emergency response readiness within EPA.<br>***Additional Information:*** The level of readiness is measured as the percentage of response team members and assets that meet scenario-based response criteria. | | | | | | | |

**(PM R36) Average time before availability of quality assured ambient radiation air monitoring data during an emergency.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | Days |
| **Actual** | 0.4 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | |

***Explanation of Results:*** Over time, improvements in data processing and review processes have reduced the time that data are in the review process and are thus available for release in less time.

***Additional Information:*** In 2005, the average time between collection and availability of data for release by EPA during emergency operations was 2.5 days.

**(PM R37) Time to approve site changes affecting waste characterization at DOE waste generator sites to ensure safe disposal of transuranic radioactive waste at WIPP.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 70 | 70 | 70 | 70 | 70 | 70 | Days |
| **Actual** | 73 | 64 | 66 | 67 | 65 | 73 | |

***Explanation of Results:*** In FY 2017, EPA made a unique legal determination about the classification of nuclear waste within the Department of Energy (DOE) complex as either spent nuclear fuel or transuranic waste, and then made a determination about its disposition based on that regulatory analysis. Given the complexity of this issue, including legal issues, more time was required for EPA and DOE to come to resolution and as a result, the target was missed.

# Goal 2 at a Glance

## PROTECTING AMERICA'S WATERS

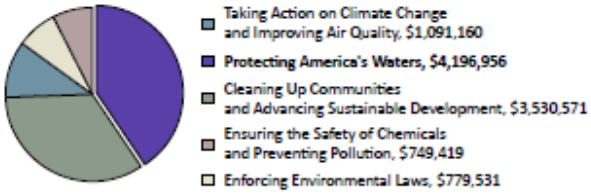
*Protect and restore waters to ensure that drinking water is safe and sustainably managed, and that aquatic ecosystems sustain fish, plants, wildlife, and other biota, as well as economic, recreational, and subsistence activities.*

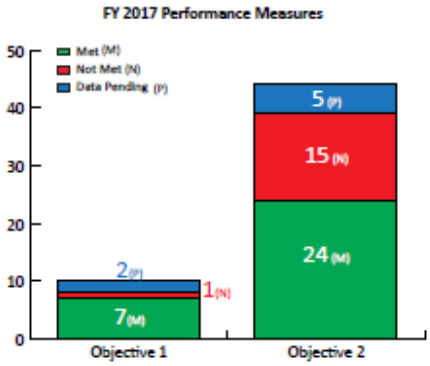
**FY 2017 Performance Measures**

Met: 31 Not Met: 16 Data Unavailable: 7

(Total Measures: 54)

**FY 2017 Obligations***




| Strategic Objective Overview | FY 2016 Obligations* | % of Goal 2 Funds |
|---|---|---|
| **Objective 2.1: Protect Human Health.** Achieve and maintain standards and guidelines protective of human health in drinking water supplies, fish, shellfish, and recreational waters, and protect and sustainably manage drinking water resources. | $1,348,235 | 32.1% |
| **Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems.** Protect, restore and sustain the quality of rivers, lakes, streams, and wetlands on a watershed basis, and sustainably manage and protect coastal and ocean resources and ecosystems. | $2,848,721 | 67.9% |
| **Goal 2 Total** | **$4,196,956** | 100.0% |

*All figures in thousands

**FY 2016 EPA Programs and Activities Contributing to Goal 2**

Beach Program
Coastal and Ocean Programs
Chesapeake Bay
Children's Health Protection
Clean Water State Revolving Fund
Columbia River Estuary Partnership
Commission for Environmental Cooperation
Drinking Water and Ground Water Protection Programs
Drinking Water Research
Drinking Water State Revolving Fund
Effluent Guidelines
Fish Consumption Advisories
Great Lakes
Gulf of Mexico
Human Health and Ecosystem Protection Research
Human Health Risk Assessment
Long Island Sound
Mercury Research
National Environmental Monitoring Initiative
National Estuary Program/Coastal Waterways
National Pollutant Discharge Elimination System
Nonpoint Source Pollution Control
Other Geographic Programs (including Lake Pontchartrain and Northwest Forest), Lake Champlain, San Francisco Bay Delta Estuary, South Florida
Persistent Organic Pollutants
Puget Sound
Surface Water Protection Program
Sustainable Infrastructure Program
Total Maximum Daily Loads
Underground Injection Control Program
U.S.-Mexico Border
Wastewater Management
WaterSense
Water Monitoring
Water Quality Research
Water Quality Standards and Criteria
Watershed Management
Wetlands Marine Pollution

## GOAL 2: PROTECTING AMERICA'S WATERS

Protect and restore waters to ensure that drinking water is safe and sustainably managed, and that aquatic ecosystems sustain fish, plants, wildlife, and other biota, as well as economic, recreational, and subsistence activities.

**Objective 1 - Protect Human Health:** Achieve and maintain standards and guidelines protective of human health in drinking water supplies, fish, shellfish, and recreational waters, and protect and sustainably manage drinking water resources.

**Summary of progress toward strategic objective:**

EPA has made significant progress towards this strategic objective by protecting and preserving our nation's drinking and recreational waters. In FY 2017, the Drinking Water program provided 92.8% (284.8 million) of the nation's population served by community water systems with drinking water that met standards. This year, EPA continued to work with states by releasing a data portal which improves the efficiency and accuracy with which water systems report data. EPA also worked with a variety of stakeholders to conduct resilience workshops to better characterize risk, determine vulnerable assets, identify mitigation strategies and implement recommendations.

EPA has advanced in the realms of resiliency and reporting while simultaneously supporting states in crisis. This year EPA conducted activities to support states on Lead and Copper Rule (LCR) compliance including working with EPA's Region 5 office to disperse $100M in Drinking Water State Revolving Funds (DWSRF) funding to Flint, Michigan. This effort will enable Flint to accelerate and expand its work to replace lead service lines and make other critical infrastructure improvements. Further, EPA released the "LCR Requirements for Optimal Corrosion Control Treatment for Large Drinking Water Systems" and the "Clarification of Recommended Tap Sampling Procedures for the Purposes of the LCR" to help drinking water systems reduce lead levels. EPA also continues to manage the Headquarters Emergency Operation Center (EOC) Water Desk in response to Hurricanes Harvey, Irma and Maria, working closely with Regional EOC staff in tracking impacts to water and wastewater plant operations and conveying this information to DHS's National Infrastructure Coordination Center.

**Challenges:**

While EPA has made strides in protecting human health, the Agency still faces challenges in drinking water protection. One such challenge is states' capacity to implement and oversee new and existing drinking water rules and keep up with emerging concerns. State programs continue to balance numerous issues while addressing contaminant challenges outside the bounds of routine work plan activities, including lead contamination, natural disaster response and emerging chemicals, particularly Per- and Polyfluoroalkylated substances (PFAS). PFAS chemicals have been detected at sites across the country, often in drinking water causing substantial concerns about the effects of PFAS on public health.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (1) Water Safe to Drink | **(PM aa) Percent of population served by CWSs that will receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 91 | 92 | 92 | 92 | 92 | 92 | Percent |
| | **Actual** | 94.7 | 92 | 93 | 91 | 91.2 | 92.8 | |

| Program Area | Performance Measures and Data |
|---|---|

***Additional Information:*** In FY 2005, 89 percent of the population served by community water systems received drinking water that met applicable drinking water standards.

**(PM apc) Fund utilization rate for the DWSRF.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 89 | 89 | 89 | 89 | 89 | 89 | Percent |
| **Actual** | 90 | 91 | 92 | 94 | 95 | 96 | |

***Explanation of Results:*** The utilization rate has consistently increased over the last few years. From FY 2014 - FY 2017 states signed a record amount of funds into new loans. This resulted from EPA and state implementation of the FY 2014 Unliquidated Obligation (ULO) Strategy, which led many states to develop agile cash flow models to more accurately balance fund inflows and outflows.

***Additional Information:*** In FY 2005, 89 percent of the population served by community water systems received drinking water that met applicable drinking water standards.

**(PM aph) Percent of community water systems that have undergone a sanitary survey within the past three years (five years for outstanding performance or those ground water systems approved by the primacy agency to provide 4-log treatment of viruses).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 95 | 95 | 83 | 79 | 79 | 85 | Percent |
| **Actual** | 89 | 93 | 87 | 90.8 | 91.2 | 90.8 | |

***Additional Information:*** In FY 2007, 92 percent of community water systems had undergone a sanitary survey. Prior to FY 2007, this measure tracked states rather than community water systems in compliance with this regulation. Starting in FY 2014, this measure includes ground water systems in addition to surface water systems. Ground water systems that have been approved by the primacy agency to provide 4-log treatment of viruses or have outstanding performance based on prior sanitary surveys may have sanitary surveys conducted no less than every five years (per 40 CFR 142.16(o)(2)(iii)). Because the universe is larger, the targets starting in FY 2014 have been adjusted accordingly.

**(PM apm) Percent of community water systems that meets all applicable health-based standards through approaches including effective treatment and source water protection.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 90 | 90 | 90 | 90 | 90 | 90 | Percent |
| **Actual** | 91 | 91 | 91 | 90 | 90.4 | 93 | |

***Additional Information:*** In FY 2005, 89 percent of community water systems met all applicable health-based drinking water standards.

**(PM aps) Percent of Classes I, II and III salt solution mining wells that have lost mechanical integrity and are returned to compliance within 180 days, thereby reducing the potential to endanger underground sources of drinking water.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 90 | 85 | 85 | 85 | 85 | 85 | Percent |
| **Actual** | 85 | 89 | 89 | 88 | 86 | Data Avail 03/2018 | |

***Additional Information:*** There is no fixed point that can be used as a baseline for this measure, since the activity that we are monitoring - "Mechanical Integrity Loss" - has not yet occurred. The universe of wells losing mechanical integrity is not static.

**(PM apt) Number of Class V motor vehicle waste disposal wells (MVWDW) and large capacity cesspools (LCC) [approximately 23,640 in FY 2010] that are closed or permitted (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 20,840 | 25,225 | 25,225 | 25,225 | 27,783 | 28,390 | Wells |
| **Actual** | 25,225 | 26,027 | 26,560 | 27,383 | 28,187 | 28,134 | |

***Explanation of Results:*** The target was missed due to an error in the FY 2015 reporting which led the program to establish an artificially high target for FY 2017. The error has since been resolved.

***Additional Information:*** FY 2012 was the first year of reporting for the measure. EPA is finding fewer and fewer wells suitable for closure or that have not already been permitted.

**(PM dw2) Percent of person months during which community water systems provide drinking water that meets all applicable health-based standards.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 95 | 95 | 95 | 95 | 95 | 95 | Percent |
| **Actual** | 97.8 | 96.9 | 97 | 96 | 96 | 96.1 | |

***Additional Information:*** “Person months” for each community water system are calculated as the number of months with any health-based violation, multiplied by the retail population served. In FY 2005, community water systems provided drinking water that met all applicable health-based drinking water standards during 95 percent of "person months."

**(PM pi1) Percent of population in each of the U.S. Pacific Island Territories (served by community water systems) that meets all applicable health-based drinking water standards, measured on a four-quarter rolling average basis.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 80 | 82 | 80 | 80 | 80 | 80 | Percent |
| **Actual** | 80 | 81 | 98 | 97.7 | 82.1 | 82 | |

***Additional Information:*** In FY 2005, 95 percent of the population in American Samoa, 10 percent in the Commonwealth of the Northern Mariana Islands (CNMI) and 80 percent in Guam were served by Community Water Systems (CWSs) that received drinking water that met all applicable health-based standards.

**(PM E) Percent of the population in Indian Country served by community water systems that receive drinking water that meets all applicable health-based drinking water standards.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 87 | 87 | 87 | 87 | 87 | 87 | Percent |
| **Actual** | 84 | 77 | 89 | 88 | 88 | 90.5 | |

***Additional Information:*** In FY 2005, 86 percent of the population served by community water systems received drinking water that met applicable drinking water standards.

**(2) Fish and Shellfish Safe to Eat**

**(PM fs1) Percent of women of childbearing age having mercury levels in blood above the level of concern.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 4.9 | No Target Established | 4.9 | No Target Established | 2.3 | No Target Established | Percent |
| **Actual** | 2.8 | Biennial | 2.1 | Biennial | 3.3 | Biennial | |

***Explanation of Results:*** There are no statistical differences between the FY 2016 result and previous years' percentages that were reported.

***Additional Information:*** In 1999-2000, 7.8 percent of women of childbearing age had mercury levels in blood above the level of concern.

**Objective 2 - Protect and Restore Watersheds and Aquatic Ecosystems:** Protect, restore, and sustain the quality of rivers, lakes, streams, and wetlands on a watershed basis, and sustainably manage and protect coastal and ocean resources and ecosystems.

**Summary of progress toward strategic objective:**

EPA has made progress toward protecting and restoring watersheds and aquatic ecosystems through restoration efforts across the country. This year, EPA began work on reviewing and potentially revising the definition of "Waters of the United States" and collaborated with the Department of Defense (DoD) to publish the Uniform National Discharge Standards Rule which will establish distinct discharge performance standards for vessels of the Armed Forces. EPA also made progress on critical actions such as the Analytical Methods Update Rule and Dental Mercury rule. Further, EPA drafted criteria and implementation materials regarding toxic algal blooms and fish consumption to protect human health and the environment.

EPA also made significant progress in water quality improvement in various water bodies through implementation of Total Maximum Daily Loads (TMDLs). To date, the EPA and states have developed over 74,000 TMDLs that address over 78,000 causes of impairments. The Long Island Sound reached a major environmental milestone in FY 2017 by attaining the wasteload allocations of the nitrogen TMDL, an annual reduction of 44 million pounds of nitrogen in the watershed. Similarly, Vermont adopted a phosphorus reduction plan to reduce phosphorus entering Lake Champlain. EPA has been working with Vermont to provide technical and financial assistance to support their efforts through stabilizing streambanks, issuing new wastewater and stormwater permits, and working with farmers, town officials and foresters to implement new land management practices. In FY 2017, Chesapeake Bay was also on track to meet phosphorus and sediment reduction goals set by the 2010 TMDL. Results of the 2014 to 2016 assessment period estimate that water quality in Chesapeake Bay and its tidal tributaries improved by 5% from the previous assessment period.

EPA, along with state managers, continue to prioritize impaired waters and have improved conditions such that 4,162 waterbodies (identified by states in 2002 as not attaining standards) fully meet water quality standards as of FY 2017. EPA played a large role in the Puget Sound Pollution Identification and Correction programs which contributed to the openings of several large shellfish bed areas in Puget Sound and improved water quality in terms of nutrients, sediments, and temperature. EPA also worked to protect and restore aquatic ecosystems through the National Estuary Program, restoring 52,257 acres of habitat. Restoration success stories also include Georgia's Piscola Creek, which has been listed as impaired for oxygen since 2000 and as of FY 2017 meets its water quality standard for dissolved oxygen after the installation of 9,811 acres of agricultural conservation practices. Finally, in FY 2017, EPA progressed toward improved water quality in tribal areas by holding its first Wetland Program Development Grant Tribal set-aside competition, awarding 17 grants to tribes.

**Challenges:**

EPA and the states still face a variety of challenges in water quality protection. The rate at which new waters are listed for water quality impairments exceeds the pace at which restored waters are removed from the list. Additionally, multiple hurricanes damaged aquatic ecosystems and affected EPA's restoration and protection efforts.. While EPA successfully protected and/or restored 52,000 acres, the Agency was still 48,000 below the target.

EPA continues to provide financial and technical assistance to states to support their efforts to reduce nutrient pollution, which continues to be a challenge affecting many streams, rivers, lakes, bays and coastal waters. EPA and the U.S. Department of Agriculture are collaborating through the National Water Quality Initiative to accelerate conservation practices to control nutrients, sediment and pathogens, and provide additional funding, technical assistance, and direction to states to increase rate of implementation of conservation practices that control these pollutants.

<table>
<tr><th>Program Area</th><th colspan="8">Performance Measures and Data</th></tr>
<tr><td rowspan="11">(1) Improve Water Quality on a Watershed Basis</td><td colspan="8">(PM L) Number of water body segments identified by states in 2002 as not attaining standards, where water quality standards are now fully attained (cumulative).</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>3,324</td><td>3,727</td><td>3,829</td><td>4,016</td><td>4,082</td><td>4,089</td><td rowspan="2">Segments</td></tr>
<tr><td>Actual</td><td>3,527</td><td>3,679</td><td>3,866</td><td>3,944</td><td>4,009</td><td>4,162</td></tr>
<tr><td colspan="8">Explanation of Results: Beginning in FY 2019, EPA will be using a new approach for measuring local improvements in water quality. The goal is to provide a consistent method for measuring progress. This new approach will enable EPA to more effectively track water quality outcomes from investments in protection and restoration.<br><br>Additional Information: In FY 2002, 39,798 water bodies were identified by states and tribes as not meeting water quality standards. Water bodies where mercury is among multiple pollutants causing impairment may be counted toward this target when all pollutants but mercury attain standards but must be identified as still needing restoration for mercury; In FY 2002, 1,703 impaired water bodies were impaired by multiple pollutants, including mercury, and 6,501 were impaired by mercury alone.</td></tr>
<tr><td colspan="8">(PM bpb) Fund utilization rate for the CWSRF.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>94.5</td><td>94.5</td><td>94.5</td><td>94.5</td><td>95</td><td>95</td><td rowspan="2">Percent</td></tr>
<tr><td>Actual</td><td>98</td><td>97</td><td>98</td><td>98</td><td>98</td><td>98</td></tr>
<tr><td colspan="8">Additional Information: In FY 2002, the fund utilization rate was 91 percent. It is calculated using data collected annually from all 51 state CWSRF programs (50 states and Puerto Rico).</td></tr>
<tr><td colspan="8">(PM bpf) Estimated annual reduction in millions of pounds of phosphorus from nonpoint sources to water bodies (Section 319 funded projects only).</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>4.5</td><td>4.5</td><td>4.5</td><td>4.5</td><td>4.5</td><td>4.5</td><td rowspan="2">Pounds (Million)</td></tr>
<tr><td>Actual</td><td>4.4</td><td>3.5</td><td>2.7</td><td>2.1</td><td>2.6</td><td>Data Avail 03/2018</td></tr>
</table>

| Program Area | Performance Measures and Data |
|---|---|

***Explanation of Results:*** (FY 2016 Results) In FY 2016, an estimated 2.6 million pounds of phosphorus originating from nonpoint sources were prevented from entering waterbodies. This load reduction failed to meet the FY 2016 target of 4.5 million pounds. Over the past six fiscal years, the program has only succeeded in reaching the phosphorus target in one of those years. There are several reasons for missing this target load reduction, including: (1) phosphorus loadings vary greatly from year to year based on weather patterns; and (2) state priorities could have shifted to watersheds where phosphorus is not a key/target pollutant.

(FY 2017 Results) EPA collects this information in its Grants Reporting and Tracking System (GRTS) for Section 319-funded on-the-ground implementation projects that will reduce phosphorus-loads to waterbodies. States are not required to enter this information into GRTS until after one full year of project implementation, so that field data can be collected to support the model calculations. Results are reported in GRTS by mid-February for the past 12 months. Therefore, FY 2017 results will be available March 2018.

***Additional Information:*** In 2005, there was a reduction of 558,000 lbs. of phosphorus from nonpoint sources.

**(PM bpg) Estimated annual reduction in million pounds of nitrogen from nonpoint sources to water bodies (Section 319 funded projects only).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 8.5 | 9.1 | 9.1 | 9.1 | 9.1 | 9.1 | Pounds (Million) |
| **Actual** | 9 | 10.4 | 11.3 | 9.6 | 12.7 | Data Avail 03/2018 | |

***Explanation of Results:*** EPA collects this information in GRTS for Section 319-funded on-the-ground implementation projects that will reduce nitrogen-loads to waterbodies. States are not required to enter this information into GRTS until after one full year of project implementation, so that field data can be collected to support the model calculations. Results are reported in GRTS by mid-February for the past 12 months. Therefore, FY 2017 results will be available March 2018.

***Additional Information:*** In 2005, there was a reduction of 3.7 million lbs. of nitrogen from nonpoint sources.

**(PM bph) Estimated annual reduction in thousands of tons of sediment from nonpoint sources to water bodies (Section 319 funded projects only).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 700 | 1,100 | 1,200 | 1,200 | 1,200 | 1,200 | Tons (Thousand) |
| **Actual** | 1,100 | 1,169 | 1,674 | 897 | 900 | Data Avail 03/2018 | |

| Program Area | Performance Measures and Data |
|---|---|

***Explanation of Results:*** (FY 2016 Results) In FY 2016, an estimated 900,000 tons of sediment-siltation originating from nonpoint sources were prevented from entering waterbodies. This load reduction failed to meet the FY 2016 target of 1.2 million tons. This fiscal year marks the second consecutive year the program has missed the sedimentation-siltation target. There are several reasons for missing this target load reduction, including: (1) sediment-siltation loadings vary greatly from year to year based on weather patterns; and (2) state priorities could have shifted to watersheds where sediment-siltation loadings is not a key/target pollutant.

(FY 2017 Results) EPA collects this information inGRTS for Section 319-funded on-the-ground implementation projects that will reduce sediment-loads to waterbodies. States are not required to enter this information into GRTS until after one full year of project implementation, so that field data can be collected to support the model calculations. Results are reported in GRTS by mid-February for the past 12 months. Therefore, FY 2017 results will be available March 2018.

***Additional Information:*** In 2005, there was a reduction of 1.68 million tons of sediment from nonpoint sources.

**(PM bpl) Percent of high-priority state NPDES permits that are issued in the fiscal year.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 80 | 80 | 80 | 80 | 80 | Percent |
| **Actual** | 130 | 55 | 80 | 82 | 80 | 77.7 | |

***Explanation of Results:*** States issued 467 priority permits within the fiscal year (467/601 = 77.7%). In many cases, significant progress was made toward issuing these remaining priority permits, but they did not get finalized before the end of the fiscal year. Some of these were finalized soon after the end of the fiscal year, while some others were carried over as priority permits for FY 2018. Timing for the issuance for these priority permits can be hard to predict as they are often the permits with the most complex technical issues, significant interest from the public, or involvement of other agencies.

***Additional Information:*** Priority Permits are permits in need of reissuance that have been identified by states as environmentally or programmatically significant. The annual universe of Priority Permits includes the number of permits selected as priority, from which a subset will be issued in the current fiscal year. In 2005, 104% of the designated priority permits were issued in the fiscal year. Starting in FY 2013, results can no longer exceed 100% issuance due to an adjustment of the measure definition, and the targets were revised accordingly. The universe used to calculate percentage results changed from the number of permits committed to issuance in the current fiscal year to the total number of permits selected as priority.

**(PM bpv) Percent of high-priority EPA and state NPDES permits (including tribal) that are issued in the fiscal year.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 80 | 80 | 80 | 80 | 80 | Percent |
| **Actual** | 128 | 55 | 77 | 81 | 78 | 74.3 | |

| Program Area | Performance Measures and Data |
|---|---|

***Explanation of Results:*** Regions and states issued 508 priority permits within the fiscal year (508/683 = 74.3%), 38 permits below the goal of 80%. In many cases, significant progress was made toward issuing these remaining priority permits, but they did not get finalized before the end of the fiscal year. Some of these were finalized soon after the end of the fiscal year, while some others were carried over as priority permits for FY 2018. Timing for the issuance for these priority permits can be hard to predict as they are often the permits with the most complex technical issues, significant interest from the public, or involvement of other agencies. Some Regions have seen an increase in the amount of staff time required to issue permits. In part, this has been due to lengthy processes to complete consultations related to the Endangered Species Act, National Historic Preservation Act, and Coastal Zone Management Act, as well as tribal consultations and obtaining state or tribal water quality certifications under Section 401 of the Clean Water Act (CWA). Additionally, some Regions are dealing with increasing work outside of issuing permits, such as supporting and negotiating appeals resolution, defending other lawsuits, modifying permits, designing adaptive management monitoring programs for permitting, conducting water monitoring to have the data to support allocations and Water Quality-based Effluent Limitations (WQBELs) in permits, and responding to requests from permittees and states. Overall, issuing permits has become more difficult and the level of scrutiny from the public is increasing..

***Additional Information:*** Priority Permits are permits in need of reissuance that have been identified by states or EPA Regions as environmentally or programmatically significant. The annual universe of Priority Permits includes the number of permits selected as priority, from which a subset will be issued in the current fiscal year. In 2005, 104% of the designated priority permits were issued in the fiscal year. Starting in FY 2013, results can no longer exceed 100% issuance due to an adjustment of the measure definition, and the targets were revised accordingly. The universe used to calculate percentage results changed from the number of permits committed to issuance in the current fiscal year to the total number of permits selected as priority.

**(PM bpw) Percent of states and territories that, within the preceding 3-year period, submitted new or revised water quality criteria acceptable to the EPA that reflect new scientific information from the EPA or sources not considered in previous standards.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 64.3 | 64.3 | 66.1 | 67.9 | 67.9 | 73.2 | Percent |
| **Actual** | 69.6 | 58.9 | 51.8 | 64.3 | 69.6 | 67.9 | |

***Explanation of Results:*** EPA and states may face significant challenges because of the technical complexity of adopting new numeric water quality criteria for pollutants such as nutrients and toxic pollutants and keeping them up to date. EPA expects continued improvement in coming years as states come into compliance with EPA's 2015 regulatory requirement for states to conduct more thorough triennial reviews of their standards.

***Additional Information:*** In FY 2004, 70% of states and territories submitted acceptable water quality criteria reflecting new scientific information.

**(PM bpx) Percent of areas associated with state-identified priority waters that are addressed by an EPA-approved TMDL or accepted plan or approach designed to achieve or maintain water quality standards.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 8 | 8 | 31 | Percent |
| **Actual** | | | | Data Not Reported | 9 | 14 | |

| Program Area | Performance Measures and Data |
|---|---|

***Explanation of Results:*** EPA continues to implement the Water Quality Framework to streamline assessment and reporting under the Clean Water Act Section 303(d) Program by using consistent methods in national and state-level surveys along with state site-specific assessment conclusions to provide a more complete picture of our nation's water quality and to demonstrate progress in water quality restoration. The Program saw regular dialogue among states and territories, across Clean Water Act Programs, and among various stakeholders about how best to develop plans for addressing impaired and healthy waters to demonstrate progress over time in achieving environmental results. This performance measure was the first one to transition to using the Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS) database as the data source and the catchment area as the unit of measure to report results. In spite of widespread impacts to staffing and resources, as well as a significant reduction in court-supervised deadlines, states continue making progress to achieve or maintain water quality standards. EPA continues to work across programs to ensure that states have robust and realistic long-term priorities that result in Total Maximum Daily Loads (TMDLs) and alternatives that are more successful in achieving water quality goals, and protection approaches.

***Additional Information:*** The measure provides the extent of priority areas identified by each state that have been addressed by EPA-approved Total Maximum Daily Loads (TMDLs) or alternative restoration approaches for impaired waters, or protection approaches for high quality waters, at the beginning of the year when the baseline is established. A TMDL is a technical plan for reducing pollutants to a body of water in order to attain water quality standards. The terms "approved" and "established" refer to the completion and approval of the TMDL itself. The universe for the measure is all watershed areas corresponding to priority waters identified by each state.

**(PM wq2) Remove the specific causes of water body impairment identified by states in 2002 (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 10,161 | 11,634 | 12,134 | 12,788 | 12,990 | 13,110 | Causes |
| **Actual** | 11,134 | 11,754 | 12,288 | 12,640 | 12,910 | 13,140 | |

***Explanation of Results:*** Beginning in FY 2019, EPA will be using a new approach for measuring local improvements in water quality. The goal is to provide a consistent method for measuring progress. This new approach will enable EPA to more effectively track water quality outcomes from investments in protection and restoration.

***Additional Information:*** In FY 2002, an estimate of 69,677 specific causes of water body impairments were identified by states.

**(PM uw1) Number of urban water projects initiated addressing water quality issues in the community.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 3 | 10 | 30 | 22 | 49 | 25 | Projects |
| **Actual** | 46 | 9 | 65 | 28 | 48 | 24 | |

| Program Area | Performance Measures and Data |
|---|---|

***Explanation of Results:*** The initiated awards target is an estimate based on past awards. The actual awards made depends on a variety of factors including the quality of proposed projects and, for the National Fish and Wildlife Foundation grants, the interest of the funding partners. EPA awarded fewer grants in FY 2017 primarily because of the interest of the funding partners.

***Additional Information:*** This measure tracks progress in grants that help communities access, improve, and benefit from their urban waters and surrounding land. Projects are initiated under the Five-Star and Urban Waters Restoration Program managed by the National Fish and Wildlife Foundation (sub-grants with EPA and leveraged public and private funds). Projects under both programs advance water quality improvement and EPA investments are consistent with CWA Section 104(b)(3) authority.

**(PM uw2) Number of urban water projects completed addressing water quality issues in the community (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 61 | 78 | 175 | Projects |
| **Actual** | | | | 60 | 110 | 158 | |

***Explanation of Results:*** EPA did not achieve 65 completions in FY 2017 to reach a cumulative number of 175, in part because some grantees requested extensions for unforeseen reasons. The number of projects completed can vary widely because it is comprised of two grant programs with different targeted project schedules.

***Additional Information:*** Results include completed Urban Waters Small Grants and grants funded in part by EPA through the Five Star and Urban Waters Restoration Program managed by the National Fish and Wildlife Foundation.

**(PM wq3) Improve water quality conditions in impaired watersheds nationwide using the watershed approach (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 312 | 370 | 408 | 446 | 484 | 519 | Watersheds |
| **Actual** | 332 | 376 | 411 | 450 | 485 | 509 | |

***Explanation of Results:*** The target was missed due to: (1) Meeting standards in a single waterbody segment impaired by multiple pollutants is more difficult than if just one or a few pollutants are impairing the single segment; (2) Many of the impairments which remain in waters identified in 2002 require many years before restoration strategies accomplish full recovery of the waterbody segments. Beginning in FY 2019, EPA will no longer be reporting on this measure. EPA is switching to a new approach for measuring local improvements in water quality. The goal is to provide a consistent method for measuring progress. This new approach will enable EPA to more effectively track water quality outcomes from investments in protection and restoration.

***Additional Information:*** In FY 2002, there were zero watersheds improved of an estimated 4,800 impaired watershed of focus having 1 or more water bodies impaired. The watershed boundaries for this measure are those established at the "12-digit" scale by the U.S. Geological Survey. Watersheds at this scale average 22 square miles in size. "Improved" means that that one or more of the impairment causes identified in FY 2002 are removed for at least 40 percent of the impaired water bodies or impaired miles/acres, or there is significant watershed-wide improvement, as demonstrated by valid scientific information, in one or more water quality parameters associated with the impairments.

<table>
<tr><th>Program Area</th><th colspan="7">Performance Measures and Data</th></tr>
<tr><td rowspan="4"></td><td colspan="7">(PM Opb) Percent of serviceable rural Alaska homes with access to drinking water supply and wastewater disposal.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>93</td><td>93</td><td>93.5</td><td>92.5</td><td>93</td><td>93.5</td><td rowspan="2">Percent</td></tr>
<tr><td>Actual</td><td>91</td><td>91</td><td>94.4</td><td>94.6</td><td>93.5</td><td>Data Avail 03/2018</td></tr>
<tr><td colspan="7">Explanation of Results: Data is calculated by the State of Alaska after the Alaska construction season ends in late Fall, and is usually available the following March.<br>Additional Information: In 2003, 77 percent of serviceable rural Alaska homes had access to drinking water supply and wastewater disposal.</td></tr>
<tr><td rowspan="8">(2) Improve Coastal and Ocean Waters</td><td colspan="7">(PM sf3) At least seventy-five percent of the monitored stations in the near shore and coastal waters of the Florida Keys National Marine Sanctuary will maintain Chlorophyll a(CHLA) levels at less than or equal to 0.35 ug l-1 and light clarity (Kd) levels at less than or equal to 0.20 m-1.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>75</td><td>75</td><td>75</td><td>75</td><td>75</td><td>75</td><td rowspan="2">Percent</td></tr>
<tr><td>Actual</td><td>CHLA: 70.9; KD: 72.5</td><td>>75 (CHLA: 84.5; KD: 80.4)</td><td>CHLA = 86.0; Kd = 87.2</td><td>CHLA = 82.0; Kd = 77.3</td><td>CHLA = 70.9; Kd = 78.5</td><td>CHLA = 76.2%; Kd = 75.9%</td></tr>
<tr><td colspan="7">Explanation of Results: Water column turbidity (cloudiness) has declined throughout the Florida Keys National Marine Sanctuary during the last 22 years. The decline in turbidity increases the clarity and the amount of light (Kd) able to penetrate which is beneficial to corals, seagrass, and algae. Chlorophyll (CHLA) levels have remained relatively consistent throughout the Sanctuary with the exception of a decline at the reef tract sites.<br>Additional Information: In 2005, total water quality was at CHLA < 0.2 ug/l, light attenuation < 0.13/meter.</td></tr>
<tr><td colspan="7">(PM sf4) At least seventy-five percent of the monitored stations in the near shore and coastal waters of the Florida Keys National Marine Sanctuary will maintain dissolved inorganic nitrogen (DIN) levels at less than or equal to 0.75 uM and total phosphorus (TP) levels at less than or equal to 0.25 uM.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>75</td><td>75</td><td>75</td><td>75</td><td>75</td><td>75</td><td rowspan="2">Percent</td></tr>
<tr><td>Actual</td><td>DIN: 81; TP: 89.5</td><td><75 (DIN: 60.0; TP: 82.3)</td><td>DIN=72.6; TP=87.6</td><td>DIN=61.7; TP=78.3</td><td>DIN = 70.8; TP = 89.1</td><td>< 75</td></tr>
</table>

| Program Area | Performance Measures and Data |
|---|---|

***Explanation of Results:*** DIN = 62.2%; TP = 89.1%. Beginning in 1996, the EPA-supported Florida Keys National Marine Sanctuary Water Quality Monitoring Program funded quarterly monitoring to 155 stations in the Sanctuary. Budget reductions ($530K to $350K) in FY 2011 reduced the monitoring stations to the current 112. The FY 2014-2018 targets were calculated using baseline data collected from 1995 – 2005 at 155 stations. To accommodate the funding reduction, the decision was made to drop the expensive, difficult to reach Dry Tortugas and reef tract stations at the western end of the Sanctuary. The sites dropped were in areas not heavily affected by human activities and of good water quality. The remaining stations are nearer to shore and potentially exposed to increased land-based sources of pollution.

***Additional Information:*** In 2005, total water quality was at CHLA < 0.2 ug/l, light attenuation < 0.13/meter.

**(PM sf6) The number of Everglades Stormwater Treatment Areas (STAs) with the annual total phosphorus (TP) outflow less than or the same as the five-year annual average TP outflow, working towards the long-term goal of meeting the 10 parts per billion annual geometric mean.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 3 | 3 | 3 | Stormwater Treatment Areas |
| **Actual** | | | | 4 | 4 | 1 | |

***Explanation of Results:*** The South Florida Water Management District (SFWMD) is under a NPDES consent order negotiated with EPA that requires them to expand the Stormwater Treatment Areas (STAs) systems. Once all the projects are completed (cost $800M), all five STAs are expected to discharge at the 10 parts per billion water quality standards.

***Additional Information:*** This was a new measure for FY 2015. The baseline period is the most recent five years. The 5-year baseline takes into account variability due to climatic conditions including extremely wet or dry years which are common in South Florida. For FY 2015, the 5-year baseline, 2010 to 2015, was 36 parts per billion (ppb) for STA-1E, 35 ppb for STA-1W, 21 ppb for STA-2, 17 ppb for STA-3/4, and 54 ppb for STA-5/6. The universe is 5 STAs.

**(PM co5) Percent of active dredged material ocean dumping sites that will have achieved environmentally acceptable conditions (as reflected in each site's management plan).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 95 | 95 | 95 | 95 | 95 | 95 | Percent |
| **Actual** | 97 | 96 | 95 | 95 | 97 | 98 | |

***Explanation of Results:*** In FY 2017, 69 sites had achieved environmentally acceptable conditions (69/71=97%).Environmentally acceptable conditions for each of the ocean dumping sites is defined in the site's management plan and is measured through on-site monitoring. In 2017, two of our sites were not meeting the conditions as described in their individual site management plans. At the Gulfport West Ocean Dredged Material Disposal Site (ODMDS), the northern portion of the site exceeds the minimum depth limitation. At the Miami ODMDS, sampling had identified elevated levels of PCBs.

**(PM 202) Acres protected or restored in National Estuary Program study areas.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | Acres |
| **Actual** | 114,575 | 127,594 | 93,557 | 111,584 | 70,462 | 52,257 | |

***Explanation of Results:*** Factors contributing to the number of acres protected and restored each year by the National Estuary Programs (NEPs) and their partners are numerous and complex making it difficult to accurately forecast with any degree of certainty. Some of the challenges that resulted in missing our target include:

1) delays in funding, increased cost, permits, or contracts. The costs to design and implement restoration projects are increasing and require more time to find and leverage the necessary finances to bring a project to fruition. Protection efforts involving real estate transactions often have legal issues that need to be carefully and responsibly worked through taking a long time to complete.

2) timing to pull together multiple partners and coordinate implementing activities. Some NEPs are working on fairly large restoration projects (over 1,000 acres) which take more time and effort to design, get various environmental clearances which can require going through a complicated and expensive process involving: technical analysis, hydrologic & hydraulics systems performance analysis, geotechnical analysis, National Environmental Policy Act (NEPA), real estate requirements, permitting, etc., and then implementation.

3) weather-related events. A number of NEPs were hit by hurricanes this Fall including San Juan Bay, Charlotte Harbor, Coastal Bend Bays and Galveston Bay. The hurricanes affected the ability of the NEPs to report because their offices were closed and without power. NEP staff homes and cars were flooded so they were not able to come into the offices and report.

***Additional Information:*** A total of 1,640,463 acres of habitat were protected or restored from FY 2002-2017.

**(3) Increase Wetlands**

**(PM 4E) In partnership with the U.S. Army Corps of Engineers, states, and tribes, achieve no net loss of wetlands each year under the Clean Water Act Section 404 regulatory program. ("No net loss" of wetlands is based on requirements for mitigation in CWA 404 permits and not the actual mitigation attained.)**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | No Net Loss | No Net Loss | No Net Loss | No Net Loss | No Net Loss | No Net Loss | Acres |
| **Actual** | No Net Loss | No Net Loss | No Net Loss | No Net Loss | No Net Loss | No Net Loss | |

***Additional Information:*** EPA receives data for this measure from the Army Corps of Engineers (ACE).

**(PM 4G) Number of acres restored and improved under the 5-Star, NEP, 319, and great water body programs (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 170,000 | 190,000 | 220,000 | 230,000 | 290,000 | 305,000 | Acres |
| **Actual** | 180,000 | 207,000 | 221,000 | 275,555 | 291,055 | 301,463 | |

| | |
|---|---|
| | ***Explanation of Results:*** The results for this measure primarily come from the NEP habitat acres. The EPA missed its target for protecting and restoring the NEP habitat acres primarily because of response to the Hurricanes Maria and Irma, delays in funding, and timing to pull together multiple partners and coordinate implementing activities.<br><br>***Additional Information:*** This measure describes the wetland acres restored through only EPA programs. Information on the national status of wetland gains and losses regardless of the cause is provided every five years by the U.S. Fish and Wildlife Service (USFWS). The most recent report (U.S. Fish and Wildlife Service, Status and Trends of Wetlands in the Conterminous United States 2004 to 2009: http://www.fws.gov/wetlands/Status-And-Trends-2009/index.html) noted an annual net loss of 13,800 acres. |
| **(4) Great Lakes** | **(PM 625) Areas of Concern Beneficial Use Impairments removed (cumulative).** |

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 33 | 41 | 46 | 60 | 65 | 72 | BUIs |
| **Actual** | 33 | 41 | 52 | 60 | 65 | 73 | |

***Explanation of Results:*** Beneficial Use Impairments (BUIs) were removed at: Black River, OH (2); St. Marys, MI; Lower Menominee River, MI/WI (2); St. Clair River, MI (2); and Rochester Embayment, NY.

***Additional Information:*** Results from this measure are achieved through Great Lakes Restoration Initiative (GLRI) funding as well as other non-GLRI federal and/or state funding. Universe is 255. Reviews of this measure conducted during the preparation of GLRI Action Plan II in FY 2014 identified overstatements of the number of beneficial use impairments removed. The cumulative results shown above are two less than were achieved through FY 2012 and FY 2013. Corrected results are shown from FY 2014 onward.

**(PM 626) Number of Areas of Concern in the Great Lakes where all management actions necessary for delisting have been implemented (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 3 | 4 | 5 | 8 | 9 | 11 | AOCs |
| **Actual** | 2 | 3 | 7 | 7 | 8 | 11 | |

***Explanation of Results:*** Areas of Concern (AOC) Management Actions were completed at the River Raisin, MI (12/5/2016), St. Marys River, MI (8/28/2017), and Lower Menominee, MI/WI (5/17/2017).

***Additional Information:*** Universe of 31. Results from this measure are achieved through GLRI funding as well as other non-GLRI federal and/or state funding.

**(PM 628) Number of acres controlled by GLRI-funded projects (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 15,500 | 34,000 | 38,000 | 94,500 | 110,000 | 120,000 | Acres |
| **Actual** | 31,474 | 35,924 | 84,500 | 101,392 | 115,889 | 134,856 | |

***Additional Information:*** There were zero acres managed for populations of invasive species controlled to a target level in 2005.

**(PM 629) Number of GLRI-funded Great Lakes rapid responses or exercises conducted.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 8 | 14 | 9 | 8 | 8 | 8 | Responses/Exercises |
| **Actual** | 15 | 7 | 8 | 21 | 11 | 25 | |

***Explanation of Results:*** The 8 Great Lakes States have committed to conducting annual training exercises, but prioritize activities to respond to detections of new invasive species. In FY 2017, multiple state agencies and others completed 25 actual responses.

***Additional Information:*** There were zero multi-agency rapid response plans established, mock exercises to practice responses carried out under those plans, and/or actual response actions in 2005.

**(PM 638) Projected phosphorus reductions from GLRI-funded projects in targeted watersheds (measured in pounds).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 130,000 | 310,000 | 525,000 | Pounds |
| **Actual** | | | | 160,117 | 402,943 | 767,864 | |

***Additional Information:*** Cumulative measure of average annual projected reduction, starting in FY 2015.

**(PM 639) Projected volume of untreated urban runoff captured or treated by GLRI-funded projects (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 30 | 70 | 120 | Gallons (millions) |
| **Actual** | | | | 37 | 116 | 239 | |

***Explanation of Results:*** GLRI agencies have learned more about which management practices work best and have used opportunities to implement projects with these best management practices, yielding better results than originally projected.

***Additional Information:*** Cumulative measure of average annual projected reduction, starting in FY 2015.

**(PM 640) Number of miles of Great Lakes tributaries reopened by GLRI-funded projects (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 2,200 | 4,200 | 4,900 | Miles |
| **Actual** | | | | 3,855 | 4,615 | 4,967 | |

***Additional Information:*** As of October 1, 2014, 3,475 miles of tributaries were reopened by GLRI-funded projects. Universe: N/A.

**(PM 641) Number of miles of Great Lakes shoreline and riparian corridors protected, restored, and enhanced by GLRI-funded projects (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 75 | 350 | 725 | Miles |
| **Actual** | | | | 313 | 662 | 947 | |

***Explanation of Results:*** Agencies continued to accelerate projects to protect, restore, and/or enhance targeted coastal habitats and key river corridors in the Great Lakes. Significant achievements were realized in small tributaries and shorelines addressing invasive or nuisance species resulting in greater miles than expected.

***Additional Information:*** As of October 1, 2014, 3,475 miles of tributaries were reopened by GLRI-funded projects. Universe: N/A.

**(PM 642) Number of acres of Great Lakes coastal wetlands protected, restored, and enhanced by GLRI-funded projects (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 7,000 | 15,000 | 30,000 | Acres |
| **Actual** | | | | 7,033 | 17,540 | 24,306 | |

***Explanation of Results:*** In addition to significant on-the-ground restoration, significant planning and design activities were initiated in order to greatly accelerate acres of coastal wetlands to be restored in FY 2018 and FY 2019. Acreage from several projects that were delayed in FY 2017 are expected to be realized in FY 2018.

***Additional Information:*** As of October 1, 2014, there were zero miles of wetlands known to have been protected, restored, and enhanced by GLRI-funded projects. Universe is 260,000 acres.

**(PM 643) Number of acres of other habitats in the Great Lakes basin protected, restored, and enhanced by GLRI-funded projects (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 127,000 | 167,000 | 187,000 | Acres |
| **Actual** | | | | 146,815 | 167,218 | 201,075 | |

***Additional Information:*** As of October 1, 2013, there were 117,000 acres of other habitats protected, restored, and enhanced by GLRI-funded projects. Universe is 1,290,000 acres.

**(5) Chesapeake Bay**

**(PM cb6) Percent of goal achieved for implementing nitrogen reduction actions to achieve the final TMDL allocations, as measured through the phase 5.3 watershed model.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 15 | 22.5 | 30 | 37.5 | 45 | 52.5 | Percent |
| **Actual** | 21 | 25 | 27 | 21 | 31 | 33 | |

***Explanation of Results:*** The nitrogen measure is well below the target value principally due to the lack of new implementation of Best Management Practices (BMPs) in Pennsylvania, particularly in the agricultural sector. The remaining six watershed jurisdictions are either on the right trajectory to achieve their 2017 targets (DC, VA, WV) or less than a million pounds above their 2017 reduction target (DE, MD, NY). Pennsylvania is currently 18 million pounds above their 2017 reduction target and 34 million pounds above their 2025 goal. Among jurisdictions, about 55% of the needed nitrogen load reductions to achieve the basinwide 2015 target are from PA and the state's Watershed Implementation Plan calls for 71% of the state reductions to come from agriculture. The Chesapeake Bay watershed portion of Pennsylvania is at 9% of their needed load reductions when they should be at 53% of the total TMDL reductions. PA's efforts have not been enough over several years to improve the rate of load reductions. Monitoring trends are levelling out and it will likely take many years for PA to make adequate progress to meet targets. Historic improving water quality trends in Susquehanna River's nitrogen loads being delivered to Chesapeake Bay have been leveling off for several years. EPA and the United States Department of Agriculture (USDA) have been working together to provide more funding, technical assistance, and direction to Pennsylvania to increase rate of implementation of practices to reduce nitrogen. EPA has also increased its oversight of Pennsylvania's programs and the use of federal actions in the agriculture and urban/suburban sectors.

***Additional Information:*** As of October 1, 2013, there were 117,000 acres of other habitats protected, restored, and enhanced by GLRI-funded projects. Universe is 1,290,000 acres.

**(PM cb7) Percent of goal achieved for implementing phosphorus reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 15 | 22.5 | 30 | 37.5 | 45 | 52.5 | Percent |
| **Actual** | 19 | 27 | 43 | 71 | 81 | 81 | |

***Additional Information:*** In FY 2010 (the baseline year), zero percent of the goal was achieved.

**(PM cb8) Percent of goal achieved for implementing sediment reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 15 | 22.5 | 30 | 37.5 | 45 | 52.5 | Percent |
| **Actual** | 30 | 32 | 37 | 25 | 48 | 57 | |

***Additional Information:*** In FY 2010 (the baseline year), zero percent of the goal was achieved.

**(6) Gulf of Mexico**

**(PM xg2) Restore, enhance, or protect a cumulative number of acres of important coastal and marine habitats.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 30,600 | 30,600 | 30,600 | 30,800 | 30,800 | 31,426 | Acres |
| **Actual** | 30,248 | 30,306 | 30,319 | 30,574 | 31,276 | 31,554 | |

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***Additional Information:*** The Gulf of Mexico program counts acres once projects are in place and results are recognized. As of FY 2008 (the baseline year), 25,515 acres were restored, enhanced, or protected in the Gulf of Mexico.

**(PM xg3) Improve and/or restore water and habitat quality to meet water quality standards in watersheds throughout the five Gulf States and the Mississippi River Basin.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | | 2 | 2 | Watersheds (12 digit HUC) |
| **Actual** | | | | | 2 | 2 | |

***Additional Information:*** New measure replaced PM xg1 in FY 2016. The measure tracks improved and/or restored watershed annually. A 12-digit Hydrologic Unit Code (HUC) watershed counts as having an improvement when there is a five percent or more positive change in at least one water quality parameter. Water quality parameter(s) appropriate to the 12-digit HUC watershed include dissolved oxygen, temperature, pH, turbidity, total suspended solids, salinity, chlorophyll, freshwater inflow, oil/grease, floatables, nutrients, and invasive species.

</td></tr>
<tr><td>(7) Long Island Sound</td><td>

**(PM li5) Percent of goal achieved in reducing trade-equalized (TE) point source nitrogen discharges to Long Island Sound from the 1999 baseline of 59,146 TE lbs/day.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 74 | 76 | 85 | 91.5 | 95 | 100 | Percent |
| **Actual** | 83 | 88 | 94 | 99.8 | 111 | Data Avail 03/2018 | |

***Explanation of Results:*** Nitrogen discharge data is collected by the states of New York and Connecticut on a calendar year basis from the 106 treatment plants discharging to Long Island Sound. December data is reported with a 30-day lag time and that data is reviewed for quality assurance and confirmed then entered into EPA's Discharge Monitoring Report system by the states in early March. Full calendar year data is required in order to capture seasonal variations in processing nitrogen through biological means. Temperature variations (fall/winter vs spring/summer) and precipitation levels affect the ability of the treatment plant operators to control nitrogen discharges.

***Additional Information:*** The 2000 TMDL baseline is 59,146 Trade-Equalized (TE) pounds/day. The ongoing TMDL target is 22,774 TE pounds/day. The Long Island Sound Nitrogen TMDL is an enforceable document with a 15-year implementation timetable that completed in 2014. There are no annual targets in the TMDL. The 'annual targets' in the strategic plan are for presentation purposes only and are estimates based on the 15-year total nitrogen reduction target. New York City and Westchester County Sewage Treatment Plants (STPs) are under Consent Orders that extended their TMDL compliance deadline to 2017. EPA monitored these for compliance, as well as Connecticut STPs for anti-backsliding compliance with their final TMDL limits, or as renegotiated with EPA.

**(PM li8) Restore, protect or enhance acres of coastal habitat from the 2010 baseline of 2,975 acres.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 218 | 420 | 410 | 135 | 95.8 | 398 | Acres |
| **Actual** | 537 | 336 | 410 | 1,678 | 532 | 669 | |

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***Explanation of Results:*** A major 100-acre coastal forest project completed in the Bronx, NY accounted for much of the greater-than-expected accomplishment.

***Additional Information:*** EPA revised this measure in FY 2012 to measure acres instead of percent of goal achieved. EPA established annual targets with partners to measure annual progress. Out-year estimates are based on continued state progress, feasibility, and funding for habitat restoration projects.

**(PM li9) Reopen miles of river and stream corridors to diadromous fish passage from the 2010 baseline of 17.7 river miles by removal of dams and barriers or by installation of bypass structures.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 28 | 75 | 1.5 | 30 | 76.95 | 30 | Miles |
| **Actual** | 72.3 | 56 | 21.6 | 0 | 50 | 22 | |

***Explanation of Results:*** Four projects forecast to be completed in FY 2017 have incurred delays in design review, logistics, or state and federal permitting: 1) Noroton River fishway (4.7 miles), 2) Heminway Pond Dam Removal (1.7 miles), 3) Flock Process Dam Removal (3.5 miles), and 4) Blackledge River Dam Removal (2 miles). These account for the shortfall. The first two projects will be completed by the end of calendar year 2017 or early in 2018.

***Additional Information:*** EPA revised this measure in FY 2012 to report river miles instead of percent of goal achieved. EPA established annual targets with partners to measure annual progress. Out-year estimates are based on continued state progress, feasibility, and funding for fish passage and bypass projects.

</td></tr>
<tr><td>**(8) Puget Sound Basin**</td><td>

**(PM ps1) Improve water quality and enable the lifting of harvest restrictions in acres of shellfish bed growing areas impacted by degrading or declining water quality (cumulative).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 3,878 | 7,758 | 4,000 | 4,700 | 4,750 | 6,350 | Acres |
| **Actual** | 2,489 | 3,203 | 3,249 | 3,277 | 3,887 | 5,083 | |

***Explanation of Results:*** The annual Puget Sound shellfish performance measure is a cumulative measure that aggregates the net gain in acres that are upgraded to approved status minus any loss of currently approved acres. In FY 2017, there were 1,935 acres that were upgraded to "approved" status due to improvements to water quality. However, there were 739 acres downgraded to "conditional" status due to recurrence of bacterial pollution predominantly from nonpoint source pollution contributing to missing our target.

***Additional Information:*** The annual Puget Sound shellfish performance measure is a cumulative measure that aggregates the net gain in acres that are upgraded to approved status minus any loss of currently approved acres. Federal state, local, and tribal partners work together to protect Puget Sound's approximately 143,000 acres of approved shellfish harvest beds, and improve its approximately 10,000 acres of potentially recoverable shellfish beds, by ensuring that adjacent water quality and safe harvesting conditions are preserved.

</td></tr>
</table>

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **(PM ps3) Protect or restore acres or shoreline miles of aquatic habitats including: estuaries, floodplains, marine and freshwater shorelines, riparian areas, stream habitats, and associated wetlands (cumulative).** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 19,063 | 31,818 | 33,818 | 43,006 | 45,500 | 48,000 | Acres |
| | **Actual** | 23,818 | 30,128 | 41,006 | 43,002 | 45,360 | 49,752 | |
| | ***Additional Information:*** The protection and restoration of habitat is one of the three priority areas for the Puget Sound Program. These activities supported salmon recovery goals of viable, harvestable populations of this tribal treaty protected resource. In FY 2008, 4,413 acres (cumulative) of tidally- and seasonally-influenced estuarine wetlands were restored. Between FY 2008 - FY 2017 49,752 acres have been protected and/or restored. | | | | | | | |
| **(9) U.S.-Mexico Border Environmental Health** | **(PM 4pg) Loading of biochemical oxygen demand (BOD) removed (million pounds/year) from the U.S.-Mexico border area since 2003 (cumulative).** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 115 | 121.5 | 137.3 | 141.1 | 150.3 | 151.9 | Million Pounds/Year |
| | **Actual** | 119 | 128.3 | 131 | 142.9 | 151.8 | 152 | |
| | ***Additional Information:*** As of FY 2003, zero pounds of biochemical oxygen demand (BOD) had been removed. | | | | | | | |
| | **(PM xb2) Number of additional homes provided safe drinking water in the U.S.-Mexico border area that lacked access to safe drinking water in 2003.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 1,000 | 3,000 | 1,700 | 600 | 500 | 1,500 | Homes |
| | **Actual** | 5,185 | 3,400 | 1,468 | 878 | 3,700 | 1,599 | |
| | ***Additional Information:*** "Additional homes" represents the number of existing households that are provided access (i.e., connected) to safe drinking water as a result of Border Environment Infrastructure Fund (BEIF)-supported projects. The known universe is the number of existing households in the U.S.-Mexico border area lacking access to safe drinking water in FY 2003 (98,515 homes). The known universe was calculated from U.S. Census and the Mexican National Water Commission (CONAGUA) sources. This measure was modified from cumulative to annual beginning in FY 2012 to better capture annual program progress. | | | | | | | |
| | **(PM xb3) Number of additional homes provided adequate wastewater sanitation in the U.S.-Mexico border area that lacked access to wastewater sanitation in 2003.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 10,500 | 27,000 | 39,500 | 40,750 | 40,720 | 450 | Homes |
| | **Actual** | 31,092 | 25,695 | 12,756 | 44,070 | 45,000 | 495 | |

| | |
|---|---|
| | ***Additional Information:*** "Additional homes" represents the number of existing households that are provided access (i.e., connected) to adequate wastewater sanitation as a result of Border Environment Infrastructure Fund (BEIF)-supported projects. The known universe is the number of existing households in the U.S.-Mexico border area lacking access to adequate wastewater sanitation services in FY 2003 (690,723). The known universe of unconnected homes was calculated from U.S. Census and the Mexican National Water Commission (CONAGUA) sources. This measure was modified from cumulative to annual beginning in FY 2012 to better capture annual program progress. |

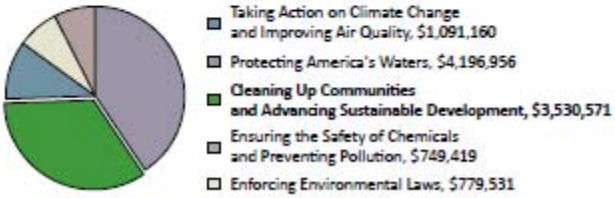
# Goal 3 at a Glance

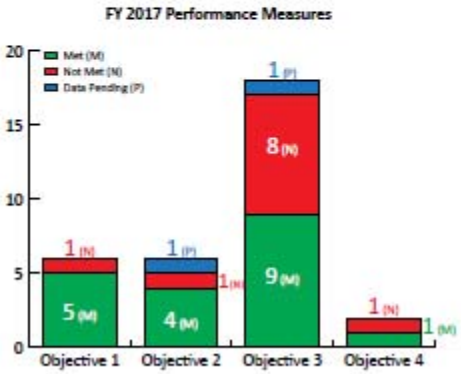
## CLEANING UP COMMUNITIES AND ADVANCING SUSTAINABLE DEVELOPMENT

*Clean up communities, advance sustainable development, and protect disproportionately impacted low-income and minority communities. Prevent releases of harmful substances and clean up and restore contaminated areas.*

**FY 2017 Performance Measures**
Met: 19 Not Met: 11 Data Unavailable: 2
(Total Measures: 32)

**FY 2017 Obligations***




| Strategic Objective Overview | FY 2016 Obligations* | % of Goal 3 Funds |
|---|---|---|
| **Objective 3.1: Promote Sustainable and Livable Communities.** Support sustainable, resilient, and livable communities by working with local, state, tribal, and federal partners to promote smart growth, emergency preparedness and recovery planning, redevelopment and reuse of contaminated and formerly contaminated sites, and the equitable distribution of environmental benefits. | $485,934 | 13.8% |
| **Objective 3.2: Preserve Land.** Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management. | $1,296,617 | 36.7% |
| **Objective 3.3: Restore Land.** Prepare for and respond to accidental or intentional releases of contaminants and clean up and restore polluted sites for reuse. | $1,655,377 | 46.9% |
| **Objective 3.4: Strengthen Human Health and Environmental Protection in Indian Country.** Directly implement federal environmental programs in Indian Country and support federal program delegation to tribes. Provide tribes with technical assistance and support capacity development for the establishment and implementation of sustainable environmental programs in Indian Country. | $92,643 | 2.6% |
| **Goal 3 Total** | **$3,530,571** | **100.0%** |

*All figures in thousands

## FY 2016 EPA Programs and Activities Contributing to Goal 3

Brownfields and Land Revitalization
Environmental Response Laboratory Network
Federal Facilities Restoration and Reuse
Global Change Research
Homeland Security
Homeland Security Research
Human Health and Ecosystem Protection Research
Human Health Risk Assessment
Leaking USTs
National Environmental Monitoring Initiative
Oil Spill Prevention Preparedness and Response
RCRA Corrective Action
RCRA Waste Management
RCRA Waste Minimization and Recycling
Research Fellowships
Risk Management Program
Sector Grant Program
Smart Growth
State and Local Prevention and Preparedness
Superfund Emergency Preparedness
Superfund Emergency Response and Removal
Superfund Enforcement
Superfund Remedial
Tribal Capacity-Building
Tribal General Assistance Program
UST Prevention and Compliance
U.S.–Mexico Border

## GOAL 3: CLEANING UP COMMUNITIES AND ADVANCING SUSTAINABLE DEVELOPMENT

Clean up communities, advance sustainable development, and protect disproportionately impacted low-income and minority communities. Prevent releases of harmful substances and clean up and restore contaminated areas

| |
|---|
| **Objective 1 - Promote Sustainable and Livable Communities:** Support sustainable, resilient, and livable communities by working with local, state, tribal, and federal partners to promote smart growth, emergency preparedness and recovery planning, brownfield redevelopment, and the equitable distribution of environmental benefits. |
| **Summary of progress toward strategic objective:**<br>EPA continued to make progress under this objective. The Brownfields program showed strong results in FY 2017, including more than 8,400 jobs created and $1.7 billion leveraged from public and private sources (more than recent years). As of the end of FY 2017, cumulatively Brownfields federal funding has leveraged more than 124,072 jobs and raised $26.47 billion from both public and private sources, advancing environmental and human health protection while stimulating economic development by returning sites to productive use. Data from local governments near 48 brownfield sites show that these entities collected an estimated total of $29 to $97 million in additional taxes in a single year after cleanup (two to seven times the $12.4 million EPA contribution). |
| **Challenges:**<br>Challenges include meeting the demand for Brownfields assistance, and making sure the funds from Brownfields revolving loan funds are available for additional projects. In addition, EPA inspects less than 4% of the universe of risk management facilities and expects this low inspection rate to continue. |

| Program Area | Performance Measures and Data | | | | | | |
|---|---|---|---|---|---|---|---|
| (2) Assess and Clean Up Brownfields | **(PM B29) Brownfield properties assessed.** | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 1,200 | 1,200 | 1,200 | 1,300 | 1,400 | 1,400 | Properties |
| | **Actual** | 1,444 | 1,528 | 1,659 | 1,320 | 1,392 | 1,419 | |
| | ***Explanation of Results:*** EPA narrowly met the FY 2017 target as EPA regions continue to work through several years of backlogged work packages and additional assessments are reported from earlier work.<br>***Additional Information*:** This measure tracks the number of properties that have been cleaned up to a regulatory risk based standard using EPA Brownfields funding, as reported by cooperative agreement recipients. EPA awards competitive grants to communities to assess, clean up, and reuse of Brownfields properties that are contaminated or perceived to be contaminated. | | | | | | |
| | **(PM B32) Number of properties cleaned up using Brownfields funding.** | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 120 | 120 | 120 | 120 | 130 | 130 | Properties |
| | **Actual** | 120 | 122 | 132 | 150 | 136 | 137 | |

| Program Area | Performance Measures and Data |
|---|---|

***Additional Information*:** This measure tracks the number of properties that have been cleaned up to a regulatory risk based standard using EPA Brownfields funding, as reported by cooperative agreement recipients.

**(PM B33) Acres of Brownfields properties made ready for reuse.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 3,000 | 3,000 | 3,000 | 4,000 | 5,500 | 5,500 | Acres |
| **Actual** | 3,314 | 4,644 | 6,389 | 7,817 | 7,354 | 5,677 | |

***Explanation of Results:*** Acres made ready for reuse varies from year-to-year as there is no programmatic control over the size of any particular brownfield site. Acreage levels fluctuate greatly from year to year, but loosely correlate with the number of anticipated cleanups and assessments.

***Additional Information*:** This measure tracks the number of acres associated with properties benefiting from EPA Brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients.

**(PM B34) Jobs leveraged from Brownfields activities.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 5,000 | 5,000 | 5,000 | 5,000 | 7,000 | 7,000 | Jobs |
| **Actual** | 5,593 | 10,141 | 12,376 | 11,229 | 9,661 | 8,472 | |

***Explanation of Results:*** Jobs leveraged varies from year-to-year as it is dependent on the final use of the brownfield sites. The relatively large accomplishment numbers in FYs: 2013, 2014, and 2015 were due to improved reporting and several very large projects. Likewise, FY 2017 result still exceeded the target and this is because it is difficult to predict the result due to the variety of factors that play a role in the redevelopment of a brownfield site, such as larger development projects producing more jobs than anticipated, and data cleanup efforts in all of the regions resulting in the reporting of more jobs.

***Additional Information*:** This measure tracks the number of cleanup and redevelopment jobs leveraged by assessment or cleanup activities conducted with EPA Brownfields funding, as reported by cooperative agreement recipients at a specific property.

**(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at Brownfields sites.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | Dollars (Billions) |
| **Actual** | 1.2 | 1.54 | 1.29 | 1.71 | 1.47 | 1.7 | |

<table>
<tr><th>Program Area</th><th>Performance Measures and Data</th></tr>
<tr><td></td><td>Explanation of Results: Target was significantly exceeded due to larger development projects in FY 2017, as well as data cleanup in the EPA Regions. Specifically, due to the difficulty of predicting the annual dollars leveraged accomplishment level, economic impacts vary greatly and are impacted by many factors beyond a brownfield site cleanup.<br><br>Additional Information: This measure tracks the number of additional dollars leveraged by assessment or cleanup activities conducted with EPA Brownfields funding, as reported by cooperative agreement recipients at a specific property.</td></tr>
<tr><td>(3) Reduce Chemical Risks at Facilities and in Communities</td><td>(PM CH2) Number of risk management plan inspections conducted.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>530</td><td>500</td><td>460</td><td>460</td><td>460</td><td>460</td><td rowspan="2">Inspections</td></tr>
<tr><td>Actual</td><td>652</td><td>539</td><td>466</td><td>376</td><td>343</td><td>397</td></tr>
</table>
Explanation of Results: Competing priorities make it difficult for EPA regions to set higher targets for conducting inspections. Between FY 2000 and FY 2017, more than 9,297 RMP inspections were completed. Of the 397 RMP facility inspections completed in FY 2017, close to 40 percent were conducted at high-risk facilities, determined by factors such as nearby population and accident history.<br><br>Additional Information: The Risk Management Plan (RMP) Rule implements Section 112(r) of the 1990 Clean Air Act amendments. RMP requires facilities (approximately 12,700) that use extremely hazardous substances to develop a Risk Management Plan. The information required from facilities under RMP helps local fire, police, and emergency response personnel prepare for and respond to chemical emergencies.</td></tr>
</table>

**Objective 2 - Preserve Land:** Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management.

**Summary of progress toward strategic objective:**

EPA made steady progress under this objective. By FY 2017, 71.6% of underground storage tank (UST) facilities are in significant operational compliance with leak detection and release prevention requirements. The Agency reviewed more than 30 draft state Underground Storage Tank (UST) regulations. In FY 2017, EPA issued new or updated controls for 151 hazardous waste facilities, significantly exceeding the goal of 115 through efficiency improvements and better training for staff. A total of 9,037,319 tons of virgin materials were offset through Sustainable Materials Management in FY 2014 (most recent data). Participants in the Federal Green Challenge improved efficiency in materials management, saving more than $17 million across natural gas, fuel oil, paper purchasing, water, and municipal solid waste categories. The Food Recovery Challenge participants worked on preventing and diverting over 740,000 tons of food from entering landfills in 2016.

**Challenges:**

Challenges include the 2.5 billion tons of solid, industrial, and hazardous wastes produced each year; potential health and environmental risks from sudden releases at older waste management units and UST sites, due to aging infrastructure, emerging contaminants or new technologies, and units closed pre-RCRA that are not covered by current requirements; and constrained ability to engage in international waste issues such as toxic wastes being moved across borders and different standards being applied to treat and dispose of wastes. Numbers of UST facilities in significant operational compliance with leak detection and release prevention requirements, and UST releases, have remained level in recent years.

<table>
<tr><th>Program Area</th><th colspan="8">Performance Measures and Data</th></tr>
<tr><td rowspan="6">(1) Waste Generation and Recycling</td><td colspan="8">(PM SM1) Tons of materials and products offsetting use of virgin resources through sustainable materials management.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>8,549,502</td><td>8,501,537</td><td>8,603,033</td><td>9,346,830</td><td>9,450,000</td><td>9,550,000</td><td rowspan="2">Tons</td></tr>
<tr><td>Actual</td><td>9,002,588</td><td>8,795,750</td><td>9,037,319</td><td>Data Avail 05/2018</td><td>Data Avail 11/2018</td><td>Data Avail 05/2019</td></tr>
<tr><td colspan="8">Additional Information: As part of its sustainable materials management program, EPA promotes three national strategies: The Federal Green Challenge, the Electronics Challenge, and the Food Recovery Challenge. These strategies are focused on using less environmentally intensive and toxic materials and employing downstream solutions, like reuse and recycling, to conserve resources for future generations. EPA is working with other federal agencies, state and tribal governments, and non-governmental organizations to promote sustainability goals through these and other initiatives.</td></tr>
<tr><td colspan="8">(PM MW8) Number of tribes covered by an integrated solid waste management plan.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>3</td><td>3</td><td>10</td><td>10</td><td>10</td><td>10</td><td rowspan="2">Tribes</td></tr>
<tr><td>Actual</td><td>13</td><td>26</td><td>20</td><td>16</td><td>15</td><td>12</td></tr>
<tr><td colspan="8">Explanation of Results: As of the end of September 2017, 236 of 574 federally-recognized tribes were covered by an integrated waste management plan.<br><br>Additional Information: Tribal integrated waste management plans help to ensure that solid wastes are managed appropriately, preventing contamination and recovering resources to the maximum extent possible. These plans are developed with direct tribal funding as well as funds from EPA and other federal agencies. EPA also offers technical assistance to tribes, such as that provided through tribal circuit riders.</td></tr>
<tr><td rowspan="5">(2) Minimize Releases of Hazardous Waste and Petroleum Products</td><td colspan="8">(PM HW0) Number of hazardous waste facilities with new or updated controls.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>100</td><td>100</td><td>100</td><td>110</td><td>115</td><td>115</td><td rowspan="2">Facilities</td></tr>
<tr><td>Actual</td><td>117</td><td>114</td><td>129</td><td>120</td><td>111</td><td>151</td></tr>
<tr><td colspan="8">Explanation of Results: The target was significantly exceeded through efficiency improvements and better training for new staff.<br><br>Additional Information: Initial and updated controls for hazardous waste facilities are essential to maintaining protective standards, operating conditions, and up to date equipment for the safe management of hazardous wastes.</td></tr>
</table>

**(PM PCB) Number of approvals issued for polychlorinated biphenyl (PCB) cleanup, storage and disposal activities.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | 150 | 200 | 200 | 200 | Approvals |
| **Actual** | | | 254 | 218 | 182 | 190 | |

***Explanation of Results:*** EPA relies on past performance to predict future workload. EPA did not receive enough applications to meet the target in FY 2017. EPA issued 1,815 approvals between FY 2008 and FY 2017.

***Additional Information:*** This measure tracks all approvals issued by EPA under Section 761 of the Toxic Substances Control Act (TSCA) for PCBs. Approvals are initiated by the individual/company and submitted to EPA for review. EPA does not have any way to identify all the PCB approval needs in a given year and relies mainly on historical information to estimate the upcoming "workload" for approvals in setting targets.

**(PM ST6) Increase the percentage of UST facilities that are in significant operational compliance (SOC) with both release detection and release prevention requirements by 0.5% over the previous year's target.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 66.5 | 67 | 70 | 70.5 | 71 | 71.5 | Percent |
| **Actual** | 71.3 | 71.6 | 72.5 | 72.6 | 72.5 | 71.6 | |

***Explanation of Results:*** In FY 2017, there were 93,228 on-site inspections of USTs.

***Additional Information:*** The Energy Policy Act of 2005 requires states and EPA to inspect all USTs every three years.

**(PM ST1) Reduce the number of confirmed releases at UST facilities to five percent (5%) fewer than the prior year's target.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | <8,120 | <7,715 | <7,330 | <6,965 | <6,615 | <6,285 | Releases |
| **Actual** | 5,674 | 6,128 | 6,847 | 6,830 | 5,582 | 5,678 | |

***Explanation of Results:*** Confirmed releases continued a long-term downward trend, after a temporary increase in releases reported in one state (New Jersey) from FY 2013 through FY 2015. There was a slight increase in the number of confirmed releases in FY 2017 because New Jersey again reported a higher number of confirmed releases while the rest of the nation continued to decrease.

***Additional Information:*** The UST prevention program works to ensure that underground sources of drinking water (groundwater) are protected from petroleum and associated chemicals leaking from USTs. There are 555,079 federally regulated USTs in the United States at approximately 200,000 facilities.

**Objective 3 - Restore Land:** Prepare for and respond to accidental or intentional releases of contaminants and clean up and restore polluted sites for reuse.

**Summary of progress toward strategic objective:**

EPA made steady progress under this objective. In FY 2017, the Agency convened a Superfund Task Force that identified 42 recommendations to streamline and improve the Superfund process. The recommendations address: expediting the cleanup and remediation process; reducing financial burden on all parties involved in the entire cleanup process; encouraging private investment; promoting redevelopment and community revitalization; and building and strengthening partnerships. Cleanup programs remediate contaminated land so it can be safely reused or continue to be used, creating more resilient, healthy, and vibrant communities. More than 94% of Resource Conservation and Recovery Act Corrective Action (RCRA CA) sites have eliminated unacceptable human exposure to contaminants, and an additional 9,400 sites were made ready for anticipated use (RAU), which contributed to the FY 2016-2017 Agency Priority Goal (APG). Consistent with the Task Force recommendations, EPA brought 24 Superfund sites with human exposures brought under control, significantly exceeding the FY 2017 target.

In response to Hurricane Harvey, EPA deployed Airborne Spectral Photometric Environmental Collection Technology (ASPECT) and Portable High-throughput Integrated Laboratory Identification System (PHILIS). ASPECT provided over 100 hours of aerial pollution release screening over 28 missions; PHILIS completed over 600 impact analyses, processing over 2,500 samples from Texas NPL sites. Also in FY 2017, the Agency oversaw responses to drinking water contamination with Per- and Polyfluoroalkylated Substances (PFAS) at Federal Facility National Priorities List (NPL) sites with impacts on more than 25,000 people.

**Challenges:**

As more sites are cleaned up, some remaining sites are larger, more complex, and technically challenging, and may be subject to construction contract delays and other remedy implementation issues. Newly detected exposure pathways and emerging contaminants also complicate site investigations and remediation efforts, five year reviews, and ultimately affect project schedules when additional site work is required. Moreover, some exposure pathways, such as fish tissue contamination, can take many years to fully remediate and therefore can impede sites from reaching the Human Exposure Under Control milestone.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (1) Emergency Preparedness and Response | (PM C1) Score on annual Core NAR. | | | | | | | |
| | | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
| | Target | 70 | 72 | 75 | 80 | 82 | 83 | Percent |
| | Actual | 75.8 | 82.2 | 78.3 | 70.9 | 64.7 | Data Avail 03/2018 | |

<table>
<tr><th>Program Area</th><th>Performance Measures and Data</th></tr>
<tr><td></td><td>
Explanation of Results: The Core National Approach Response (NAR) evaluation score is derived from a combination of response readiness exercises at the regional level to identify strengths and gaps in response readiness. These exercises are designed to evaluate Regional standard operating procedures, Emergency Operations Center, procedures, equipment knowledge, area planning, coordination/outreach. With redesign of the Core NAR evaluations, the result has been decreasing during recent fiscal years. Reporting is delayed due to evaluation of complex data from all EPA regions. Beginning in FY 2014, EPA redesigned the evaluation to focus on a performance based approach, which resulted in lower results. With redesign of the Core NAR evaluations, the result has been decreasing during recent fiscal years.
Additional Information: The Core NAR score reported for this measure is based upon the combination of two scores, one which measures day-to-day response readiness and another that measures national preparedness for chemical, biological, radiological and nuclear incidents. The maximum score is 100. Beginning in FY 2014, the Core NAR evaluation has taken place after the end of the fiscal year in order to capture a more complete picture of response readiness. Results are reported in the following year.
(PM 137) Number of Superfund removals completed.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td></td><td></td><td></td><td>275</td><td>275</td><td>275</td><td rowspan="2">Removals</td></tr>
<tr><td>Actual</td><td></td><td></td><td></td><td>278</td><td>226</td><td>255</td></tr>
</table>
Explanation of Results: Target was missed due to difficulty in predicting how many threats will arise in a year. EPA quickly responds when these events take place. In recent years there has been a trend toward fewer removals due to factors including a shift in resources toward large time critical removals that cannot be listed on the National Priorities List (NPL).
Additional Information: Implemented in FY 2015, this measure combined the retired Superfund-lead (PM 132) and Potentially Responsible Party (PRP)-lead removals with EPA oversight (PM 135) measures. EPA continues to internally track results for both Superfund-lead and PRP-lead removals with Agency oversight.
(PM 337) Percentage of all Federal Response Plan (FRP) inspected facilities found to be non-compliant which are brought into compliance.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>35</td><td>40</td><td>50</td><td>60</td><td>60</td><td>60</td><td rowspan="2">Percent</td></tr>
<tr><td>Actual</td><td>73</td><td>78</td><td>79</td><td>79</td><td>82</td><td>82</td></tr>
</table>
Explanation of Results: This measure tracks FRP facilities that have been inspected and brought into compliance since FY 2010. From FY 2010 to FY 2017, 1,003 facilities were brought into compliance. In FY 2017, EPA brought 131 non-compliant facilities into compliance.
Additional Information: The FRP rule requires certain facilities (approximately 4,500) to submit a response plan and prepare to respond to a worst case oil discharge or threat of a discharge. Oil spills in these facilities have a greater potential than typical Spill Prevention, Control and Countermeasures (SPCC) facilities to cause harm to human health and the environment.
</td></tr>
</table>

**(PM 338) Percentage of all Spill Prevention, Control and Countermeasure (SPCC) inspected facilities found to be non-compliant which are brought into compliance.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 35 | 40 | 50 | 60 | 60 | 60 | Percent |
| **Actual** | 63 | 69 | 72 | 74 | 78 | 77 | |

***Explanation of Results:*** Percentages are artificially high and do not capture the declining rate of SPCC inspections conducted. This measure tracks SPCC facilities that have been inspected and brought into compliance since FY 2010. From FY 2010 to FY 2017, 2,867 facilities were brought into compliance out of a total of 3,724 facilities that were found to be out of compliance.

***Additional Information:*** The SPCC rule helps facilities (approximately 540,000) prevent a discharge of oil into waters or adjoining shorelines. Oil spills at certain high-risk SPCC facilities have a greater potential than non-high risk SPCC to cause harm to human health and the environment.

**(2) Clean Up Contaminated Land**

**(PM 115) Number of Superfund remedial site assessments completed.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 900 | 650 | 700 | 850 | 675 | 675 | Assessments |
| **Actual** | 1,151 | 772 | 794 | 869 | 703 | 747 | |

***Explanation of Results:*** Through FY 2017, EPA and its state and tribal partners completed a cumulative total of 95,341 remedial site assessments.
***Additional Information:*** Remedial site assessments collect site data to determine if cleanup attention may be needed at a potential hazardous waste site. Multiple and progressively more complex assessments may be required to make this determination at a site.

**(PM 151) Number of Superfund sites with human exposures brought under control.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 10 | 10 | 10 | 9 | 9 | 9 | Sites |
| **Actual** | 13 | 14 | 9 | 10 | 12 | 24 | |

***Explanation of Results:*** Through FY 2017, EPA ensured that 1,439 final and deleted NPL sites, and 36 non-NPL sites with Superfund Alternative Approach (SAA) agreements in place, met the criteria to be determined human exposure under control. EPA significantly exceeded the FY 2017 target due to factors including remedial investigations concluding ahead of schedule, Five-Year reviews concluding in favorable outcomes, remedial investigations sites previously determined as "Insufficient Data," changing to "Under Control," and the Superfund Task Force effort that has heightened focus on bringing additional sites "Under Control."

***Additional Information:*** This measure documents human health protection by measuring progress achieved in controlling unacceptable human exposures at Superfund sites. Beginning in FY 2014, performance results have included non-NPL Superfund Alternative Approach (SAA) sites.

**(PM CA1) Percentage of RCRA corrective action facilities with human exposures to toxins under control.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 81 | 85 | 87 | 90 | 92 | 94 | Percent |
| **Actual** | 81 | 85 | 87 | 90 | 92 | 94 | |

***Explanation of Results:*** Through FY 2017, EPA achieved human exposures under control at 94 percent of RCRA corrective action facilities (3,534 out of 3,779 facilities).

***Additional Information:*** There are a total of 3,779 corrective action facilities in the priority 2020 corrective action universe. EPA is continually assessing the priority facilities and every three years makes necessary modifications to the priority baseline, in conjunction with the EPA Strategic Plan cycle.

**(PM CA2) Percentage of RCRA corrective action facilities with migration of contaminated groundwater under control.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 69 | 73 | 77 | 80 | 84 | 88 | Percent |
| **Actual** | 72 | 76 | 79 | 82 | 84 | 87 | |

***Explanation of Results:*** Through FY 2017, EPA achieved groundwater contamination under control at 87 percent of RCRA corrective action facilities (3,276 out of 3,779 facilities). EPA missed the FY 2017 target due to a variety of challenges, including the complexity of remaining sites, emerging contaminants, and changing screening/toxicity values.

***Additional Information:*** There are a total of 3,779 corrective action facilities in the priority 2020 corrective action universe. EPA is continually assessing the priority facilities and every four years makes necessary modifications to the priority baseline, in conjunction with the EPA Strategic Plan cycle. Safe drinking water and the protection of ground water are Agency priorities.

**(PM CA5) Percentage of RCRA corrective action facilities with final remedies constructed.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 46 | 51 | 55 | 60 | 64 | 69 | Percent |
| **Actual** | 47 | 51 | 56 | 60 | 64 | 67 | |

***Explanation of Results:*** Through FY 2017, EPA achieved final remedies at 67 percent of RCRA corrective action facilities (2,547 out of 3,779 facilities). The target was missed because the remaining sites tend to be larger, more complex, and technically challenging.

***Additional Information:*** There are a total of 3,779 corrective action facilities in the priority 2020 corrective action universe. EPA is continually assessing the priority facilities and every three years makes necessary modifications to the priority baseline, in conjunction with the EPA Strategic Plan cycle.

**(PM CA6) Percentage of RCRA corrective action facilities with corrective action performance standards attained.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | 21 | 24 | 30 | 32 | Percent |
| **Actual** | | | 24 | 28 | 31 | 34 | |

***Explanation of Results:*** Through FY 2017, EPA achieved the goal of performance standards attained (these are the cleanup standards required to ensure protection of human health and the environment at an individual facility) at 34 percent of RCRA corrective action facilities (1,271 out of 3,779 facilities).

***Additional Information:*** There are a total of 3,779 corrective action facilities in the priority 2020 corrective action universe. EPA is continually assessing the priority facilities and every three years makes necessary modifications to the priority baseline, in conjunction with the EPA Strategic Plan cycle.

**(PM 111) Percentage of confirmed releases pending cleanup completion at LUST facilities.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | No Target Established | No Target Established | 15 | 14 | 13 | 12 | Percent |
| **Actual** | 16 | 15 | 14 | 14 | 13 | 13 | |

***Explanation of Results:*** As of the end of FY 2017, 538,193 releases have been reported, 468,898 (or 87 percent) of which have been cleaned up. As the backlog gets smaller, the remaining cleanups tend to be those which are more complex and time-consuming.

**(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 11,250 | 10,100 | 9,000 | 8,600 | 8,600 | 8,600 | Cleanups |
| **Actual** | 10,927 | 11,582 | 10,393 | 9,869 | 8,977 | 8,775 | |

***Explanation of Results:*** The performance trend reflects a variety of challenges, including the complexity of remaining sites, an increased state workload, a decrease in available state resources and the increasing costs of cleanups.

***Additional Information:*** A 2017 EPA study found that high profile UST releases decrease nearby property values by 2%-6%. Once cleanup is completed, nearby property values rebound by a similar margin.

**(PM 113) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration in Indian country.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 42 | 42 | 37 | 30 | 26 | 26 | Cleanups |
| **Actual** | 47 | 18 | 26 | 32 | 30 | 21 | |

***Explanation of Results:*** A large percentage of the remaining sites are more complex, which has led to the slowdown of number of cleanups completed in Indian Country. Through FY 2017, EPA completed a cumulative total of 1,149 leaking underground storage tank cleanups in Indian country, out of a universe of approximately 1,412 confirmed releases. This is a subset of the national total of 469,898 leaking underground storage tanks cleanups completed. As of the end of FY 2017, there were 263 Leaking Underground Storage Tank (LUST) cleanups remaining to be completed in Indian country.

**(PM 141) Number of Superfund sites with remedy construction completed.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 22 | 19 | 15 | 13 | 13 | 13 | Completions |
| **Actual** | 22 | 14 | 8 | 14 | 13 | 10 | |

***Explanation of Results:*** Through FY 2017, EPA completed construction at 1,195 final and deleted NPL sites and 13 non-NPL sites with SAA agreements in place. The pool of candidates sites is shrinking and the remaining projects tend to be large, more complex, and technically challenging. In addition, cleanup projects are also subject to construction, contract, and other remedy implementation delays.

***Additional Information:*** A construction completion Superfund site has completed physical construction of all cleanup actions. Beginning in FY 2014, performance results have included non-NPL Superfund Alternative Approach (SAA) sites.

**(PM 152) Number of Superfund sites with contaminated groundwater migration brought under control.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 15 | 15 | 15 | 13 | 13 | 13 | Sites |
| **Actual** | 18 | 18 | 11 | 15 | 17 | 14 | |

***Explanation of Results:*** Through FY 2017, EPA ensured that 1,143 final and deleted NPL sites, and 26 sites with SAA agreements in place, met the criteria to be determined Groundwater Migration Under Control.

***Additional Information:*** Bringing groundwater migration under control ensures that contamination is below protective, risk-based levels or that, where the migration is stabilized, there is no acceptable discharge to surface water. Beginning in FY 2014, performance results have included non-NPL Superfund Alternative Approach (SAA) sites.

**(PM 170) Number of remedial action projects completed at Superfund sites.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 130 | 115 | 115 | 105 | 105 | 105 | Projects |
| **Actual** | 142 | 121 | 115 | 104 | 105 | 97 | |

***Explanation of Results:*** From FY 2011 through FY 2017, EPA completed 801 remedial action projects at final and deleted NPL sites and 15 remedial action projects at non-NPL sites with SAA agreements in place. EPA missed the target because the remaining remedial action projects that tend to be larger, more complex, and technically challenging, and are also subject to construction contract delays, bad weather, and other remedy implementation issues. EPA will continue to focus both funds and personnel resources on completing construction projects to protect human health and the environment.

***Additional Information:*** A remedial action project completion at a Superfund site refers to the construction or implementation of a discrete scope of activities supporting Superfund site cleanup. Beginning in FY 2014, performance results have included non-NPL Superfund Alternative Approach (SAA) sites.

**(PM FF1) Percentage of Superfund federal facility sites construction complete.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | 86 | 87 | 88 | 85 | Percent |
| **Actual** | | | 84 | 84 | 84 | 85 | |

***Explanation of Results:*** Through FY 2017, construction has been completed at 79 sites out of the total Federal Facility NPL Universe of 174 sites which contain 2,225 Operable Units.

***Additional Information:*** This measure is based on the average of three specific factors: 1) Operable unit (OU) percent complete; 2) Total cleanup actions percent complete; and 3) Duration of cleanup actions percent complete.

**(PM S10) Number of Superfund sites made ready for anticipated use site-wide.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 65 | 60 | 55 | 45 | 45 | 45 | Sites |
| **Actual** | 66 | 56 | 45 | 45 | 41 | 43 | |

***Explanation of Results:*** Through FY 2017, EPA ensured that 828 final and deleted NPL sites, and 8 non-NPL sites with SAA agreements in place, met the criteria to be determined site-wide ready for anticipated use. Meeting this target frequently requires working with entities outside of EPA to perform tasks and consent to actions outside the Agency's control including implementation of Institutional Controls and 5-year reviews to identify any potential issues that are not consistent with human exposure under control criteria, emerging contaminants, or vapor intrusion issues. EPA plans to implement the recommendations of the Superfund Task Force in FY 2018 to improve results.

***Additional Information:*** This measure reflects the importance of considering future land use as part of the cleanup process by tracking the number of sites meeting the following criteria: All aspects of the cleanup are in place and have been achieved for any media that may affect current and reasonably anticipated future land uses, so that there are no unacceptable risks; all land use restrictions or other controls required as part of the cleanup are in place; and sites are final or deleted NPL sites, or non-NPL Superfund Alternative Approach (SAA) sites, that have reached the construction completion milestone. SAA sites were included in performance results beginning in FY 2014.

**Objective 4 - Strengthen Human Health and Environmental Protection in Indian Country:** Directly implement federal environmental programs in Indian country and support federal program delegation to tribes. Provide tribes with technical assistance and support capacity development for the establishment and implementation of sustainable environmental programs in Indian country.

**Summary of progress toward strategic objective:**

EPA is conducting a multi-pronged direct implementation assessment to ensure that environmental regulatory programs are as effective in Indian country as they are outside of Indian country. Efforts continue in three identified areas: 1) increasing consistency and access to tribal data in Agency data systems though use of the tribal identifier code or equivalent; 2) use of EPA-Tribal Environmental Plans (ETEPs) by all EPA offices to align tribal and EPA priorities through EPA-tribal joint planning; and 3) making EPA direct implementation programs more effective through individual program assessments. The Agency is conducting the first DI program assessment, for the Resource Conservation Recovery Act (RCRA) Subtitle C Treatment, Storage and Disposal Facilities (TSDFs) program.

EPA is on track to meet the long-term goal of an ETEP for each applicable tribe. ETEPs are being developed to identify the sphere of regulated entities per tribe, define mutual roles and responsibilities for program implementation, and document each tribe's intermediate and long-term goals for developing, establishing and implementing environmental protection programs.

**Challenges:**

Only a small number of programs have been delegated to tribes, and a much smaller number of tribes have received compliance and enforcement authority in those delegations. As of the end of FY 2017, although EPA has approved 112 non-grant treatment in a manner similar to a state (TAS) applications for certain parts of EPA statutes for 82 tribes, only 12 individual tribal programs include compliance and enforcement authority. As a result, EPA directly implements the vast majority of federal environmental in Indian country. EPA direct implementation faces multiple challenges:

- limited information for decision-making,
- competing demands and priorities to implement more than nine major federal environmental statutes for 567 federally recognized tribes,
- tribal diversity (population, culture, geography, economic development, expertise, income, priorities), and
- unique legal and policy issues associated with federal, tribal, and state law.

These factors may increase the risk of failure to adequately understand, prevent or address harms in Indian country through programs under EPA regulatory authority. In addition, with only limited or inadequate data to fully, uniformly and successfully assess the extent of EPA direct implementation activities and tribal delegated programs, EPA risks inefficient use and possible misallocation of limited resources.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (1) Improve Human Health and the Environment in Indian Country | (PM 5PQ) Percent of Tribes implementing federal regulatory environmental programs in Indian country. | | | | | | | |
| | | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
| | Target | 22 | 24 | 25 | 25 | 25 | 25 | Percent |
| | Actual | 21 | 19 | 19 | 20 | 20 | 23 | |

| Program Area | Performance Measures and Data |
|---|---|
| | ***Explanation of Results:*** Challenges include tribal diversity (population, culture, geography, income, economic development, program management expertise, priorities, etc.); unique legal and policy issues with federal, tribal and state law; and competing demands and priorities. Opportunities include the Indian Environmental General Assistance Program (GAP) Performance Management System currently under development, which will assess the progress of GAP grant funding to encourage development of tribal capacity to implement federal environmental programs in Indian country.<br>***Additional Information:*** There are 572 tribal entities, including tribes and inter-tribal consortia, that are eligible for GAP funding. |

**(PM 5PR) Percent of Tribes conducting EPA approved environmental monitoring and assessment activities in Indian country.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 54 | 57 | 58 | 58 | 58 | 58 | Percent |
| **Actual** | 54 | 56.5 | 31 | 36 | 54 | 66 | |

***Additional Information:*** There are 572 tribal entities, including tribes and inter-tribal consortia, that are eligible for GAP funding.

# Goal 4 at a Glance

## ENSURING THE SAFETY OF CHEMICALS AND PREVENTING POLLUTION

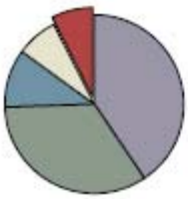
*Reduce the risk and increase the safety of chemicals and prevent pollution at the source.*

**FY 2017 Performance Measures**

Met: 11 Not Met: 3 Data Unavailable: 14

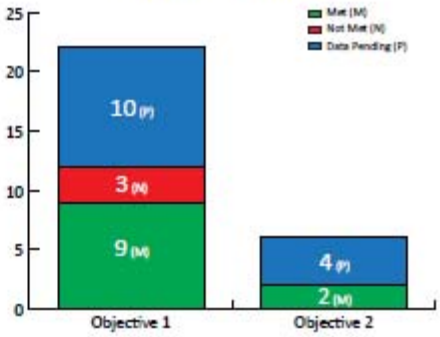
(Total Measures: 28)

**FY 2017 Obligations***



- Taking Action on Climate Change and Improving Air Quality, $1,091,160
- Protecting America's Waters, $4,196,956
- Cleaning Up Communities and Advancing Sustainable Development, $3,530,571
- **Ensuring the Safety of Chemicals and Preventing Pollution, $749,419**
- Enforcing Environmental Laws, $779,531

**FY 2017 Performance Measures**




| Strategic Objective Overview | FY 2016 Obligations* | % of Goal 4 Funds |
|---|---|---|
| **Objective 4.1: Ensure Chemical Safety.** Reduce the risk and increase the safety of chemicals that enter our products, our environment and our bodies. | $697,839 | 93.1% |
| **Objective 4.2: Promote Pollution Prevention.** Conserve and protect natural resources by promoting pollution prevention and the adoption of other sustainability practices by companies, communities, governmental organizations, and individuals. | $51,580 | 6.9% |
| **Goal 4 Total** | **$749,419** | 100.0% |

*All figures in thousands

## FY 2016 EPA Programs and Activities Contributing to Goal 4

Chemical Risk Review and Reduction
Chemical Safety and Sustainability Research
Endocrine Disruptors
Lead Risk Reduction and Lead Categorical Grant Programs
International Sources of Pollution
Pesticides Program Implementation Categorical Grant Program
Pollution Prevention
Pollution Prevention Categorical Grant Programs
Protect Human Health from Pesticide Risk
Protect the Environment from Pesticide Risk
Realize the Value of Pesticide Availability
Science Policy Biotechnology
Toxics Release Inventory
Trade and Governance

## GOAL 4: ENSURING THE SAFETY OF CHEMICALS AND PREVENTING POLLUTION

Reduce the risk and increase the safety of chemicals and prevent pollution at the source

**Objective 1 - Ensure Chemical Safety:** Reduce the risk and increase the safety of chemicals that enter our products, our environment and our bodies.

**Summary of progress toward strategic objective:**

Pesticide Registration and Registration Review ensure that pesticides now available and coming to market meet current safety standards. EPA has achieved significant results within this objective by placing special emphasis on completing all docket openings and accelerating the pace of development of final pesticide review work plans to meet the objectives of the *FY 2014-2018 EPA Strategic Plan* and statutorily mandated deadlines. Progress includes reductions since 2008 of 33% in the number of exposures of children to rodenticides and 34% in moderate to severe exposure incidents to carbamates and organophosphates. The pesticide program is on track to meet all strategic targets and most performance measures. The program continues to meet or exceed targets for the registration goal under the Pesticide Registration Improvement Act (PRIA) which includes comprehensive risk assessment, while also exceeding the risk assessment targets under registration review. Moving forward, the program will continue to look for efficiencies with partners and stakeholders to maintain an aggressive rate of progress in meeting targets, goals and objectives, while protecting human health and the environment.

EPA continues to make progress toward reducing the risk and ensuring the safety of other commercial chemicals. Since June 2016, when the Frank R. Lautenberg Chemical Safety for the 21st Century Act was enacted, amending the Toxic Substances Control Act (TSCA), EPA has focused its efforts on timely and successful implementation of the new law's requirements. In FY 2017, EPA finalized three "framework" rules pertaining to the chemical risk evaluation process, prioritization of chemicals for evaluation, and reporting by industry of active/inactive chemicals. EPA also issued scoping documents for the initial 10 chemicals under evaluation, guidance for external parties on submitting draft evaluations, and a statutory interpretation on upfront substantiation of confidential business information (CBI) claims. EPA finalized rules on nanoscale materials and formaldehyde exposure from composite wood products, published proposed risk management requirements for 3 chemicals assessed prior to the new law (TCE, NMP, methylene chloride), completed existing and new chemical Significant New Uses Rules (SNURs), and released additions to the Mercury Export Ban and an initial mercury inventory report.

**Challenges:**

EPA faces continuing challenges in addressing the extensive new requirements of the TSCA amendments, many involving technical complexity and requiring adherence to high scientific standards.

| Program Area | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (1) Protect Human Health from Chemical Risks | **(PM J11) Reduction in moderate to severe exposure incidents associated with organophosphates and carbamate insecticides in the general population.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 10 | 15 | 25 | 30 | 30 | 30 | Percent |
| | **Actual** | 20 | 25 | 27 | 34 | Data Avail 10/2018 | Data Avail 10/2019 | |

<table>
<tr><th>Program Area</th><th>Performance Measures and Data</th></tr>
<tr><td></td><td>
Explanation of Results: The overall downward trend continues as a result of past regulatory actions. Within year fluctuations are to be anticipated. The calculation for this measure is (American Association of Poison Control Centers (AAPCC) incident count from Jan 2008 – Dec 2008) minus (AAPCC incident count from Jan 2015 – Dec 2015) / (AAPCC incident count from Jan 2008 – Dec 2008). Result – 108 / 316 = 0.34 or 34%.
Additional Information: Percent reduction to moderate to severe exposure incidents are calculated from 2008 data (316 exposure incidents) as reported in the American Association of Poison Control Centers' National Poisoning Data System (NPDS) for organophosphates and carbamate pesticides. Two-year reporting lag.
(PM 008) Percent of children (aged 1-5 years) with blood lead levels (>5 ug/dl).
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>1.5</td><td>No Target Established</td><td>1.0</td><td>No Target Established</td><td>1.0</td><td>No Target Established</td><td rowspan="2">Percent</td></tr>
<tr><td>Actual</td><td>2.1</td><td>Biennial</td><td>1.2</td><td>Biennial</td><td>Data Avail 10/2018</td><td>Biennial</td></tr>
</table>
Explanation of Results: No reporting; biennial year.
Additional Information: Data released by the Centers for Disease Control (CDC) from the National Health and Nutritional Evaluation Survey (NHANES) for the 2007-2010 sampling period showed that an estimated 2.6% of children ages 1 - 5 had elevated blood lead levels (5 ug/dl or greater). Background information is available on EPA’s website at www.epa.gov/lead. Data for this measure are reported biennially.
(PM 10D) Percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>13</td><td>No Target Established</td><td>20</td><td>No Target Established</td><td>25</td><td>No Target Established</td><td rowspan="2">Percent</td></tr>
<tr><td>Actual</td><td>34.8</td><td>Biennial</td><td>34.0</td><td>Biennial</td><td>Data Avail 10/2018</td><td>Biennial</td></tr>
</table>
Explanation of Results: No reporting; biennial year.
Additional Information: Data released by the CDC from the NHANES for the 2007-2010 sampling period showed that the estimated difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old was 28.4%. Data for this measure are reported biennially.
</td></tr>
</table>

**(PM D6A) Reduction in concentration of PFOA in serum in the general population.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 1 | No Target Established | 25 | No Target Established | 41 | No Target Established | Percent Reduction |
| **Actual** | 32 | Biennial | 37 | Biennial | Data Avail 10/2018 | Biennial | |

***Explanation of Results:*** The Agency has taken a range of voluntary and regulatory actions to address concerns with Perfluorooctanoic Acid (PFOA). One of these actions is the 2010/2015 PFOA Stewardship Program that was launched in 2006 with the eight major companies in the industry committing to work toward eliminating emissions and product content of PFOA by 2015. All of the participating companies in the voluntary program have met the PFOA Stewardship Program goals. As a result of these actions, blood concentrations of PFOA have been decreasing, as evidenced by NHANES reports. The FY 2014 result demonstrates that EPA has substantially exceeded the long-term target for reduction in PFOA concentrations in blood serum in the general population.

***Additional Information:*** Data for this measure were derived from Centers for Disease Control's National Health and Nutrition Examination Survey (NHANES) on PFOA concentration in the general population. The geometric mean concentration in serum as determined from 2009-2010 sampling data is 3.07 µg/L. Data for this measure were reported biennially. Perfluoroalkyl substances, including PFOA, are a class of manmade chemicals that are very persistent in the environment and in the human body. As a result, people may become exposed to these chemicals manufactured months or years in the past. Because they have been used in an array of consumer products, most people have been exposed to these chemicals. Studies indicate that PFOA can cause reproductive and developmental liver, kidney and immunological effects in laboratory animals and humans. In addition, PFOA has caused tumors in animal studies.

**(PM E01) Number of chemicals for which Endocrine Disruptor Screening Program (EDSP) decisions have been completed**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 5 | 20 | 59 | 0 | 0 | 1,000 | Chemicals |
| **Actual** | 1 | 0 | 3 | 54 | 1 | 1,812 | |

***Explanation of Results:*** EPA now has 1,812 estrogen bioactivity scores for chemicals in the EDSP chemical universe. The estrogenic bioactivity scores are calculated using the Office of Research and Development's ToxCast data and the validated ToxCast "ER Model" for bioactivity. The estrogenic bioactivity scores are publicly available at https://actor.epa.gov/edsp21/. EPA is currently communicating these decisions to stakeholders.

***Additional Information:*** These chemicals have the potential to interact with the estrogen, androgen, steroidogenesis and/or thyroid systems. The EDSP has a universe of chemicals of approximately 10,000 chemicals that is described at: https://www.epa.gov/endocrine-disruption/endocrine-disruptor-screening-program-edsp-universe-chemicals. Tier 1 screening determines whether a chemical has the potential to interact with the endocrine system and requires more thorough testing. Tier 2 testing is conducted to rule out bioactivity for chemicals that show more potential for endocrine bioactivity. If a chemical is determined to indeed have endocrine bioactivity after completing EDSP Tier 2 testing, EPA would most likely conduct a complete risk assessment and risk mitigation exercise for that chemical. High throughput screening (HTS) and computational toxicology (CompTox) tools for Estrogen Receptor (ER) are now used as alternatives to the Tier 1 assays. Implementing HTS and CompTox methods allows EPA to screen a greater number of chemicals, while also reducing animal use. This measure tracks the number of chemicals with screening level decisions based on integrated scientific reviews of: 1) Tier 1 assays; 2) other scientifically-relevant information (e.g., CFR158 data, published literature, high throughput endocrine activity and exposure information); and 3) decisions based on other information that determines whether further endocrine-related testing is necessary for a chemical (e.g., regulatory status of the chemical). EDSP decisions for a chemical can range from determining potential to interact with the estrogen, androgen, steroidogenesis and/or thyroid hormone systems to otherwise determining whether further endocrine related testing is necessary. Fifteen decisions were completed through FY 2012. In FY 2015, EPA published a Federal Register Notice incorporating Toxicity ForeCaster (ToxCast) data for more than 1,800 chemicals that, combined with additional data, could be used to complete the screening decisions.

**(PM 012) Percent reduction of children's exposure to rodenticides.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 5 | 5 | 10 | 25 | 25 | 25 | Percent |
| **Actual** | 17 | 24 | 25 | 33 | Data Avail 10/2018 | Data Avail 10/2019 | |

***Explanation of Results:*** The overall downward trend continues, the result of past regulatory actions. The calculation for this measure is (AAPCC incident count from Jan 2008 – Dec 2008) minus (AAPCC incident count from Jan 2015 – Dec 2015) / (AAPCC incident count from Jan 2008 – Dec 2008). Result for 2015 is 3, 849 / 11,674 = 0.33 or 33%.

***Additional Information:*** Percent reduction of the total number of confirmed and likely rodenticide exposures to children is calculated from 2008 data (11,674 rodenticide exposures to children) from the Poison Control Centers' National Poison Data System. Two-year reporting lag.

**(PM RA1) Annual number of chemicals for which risk assessments are finalized through EPA's TSCA Existing Chemicals Program.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | 3 | 7 | 12 | 0 | Chemicals |
| **Actual** | | | 4 | 1 | 0 | 0 | |

***Explanation of Results:*** This measure is discontinued after FY 2017 as it measures progress against a list of chemicals developed under the previous TSCA law. In June 2016, Congress passed amendments to TSCA, establishing, among other things, a new plan for assessing existing chemicals. The program is currently making the changes needed to implement the new law, which requires each risk evaluation to be completed within three and one half years. In addition, the scope of each assessment is broadened to include all commercial uses of the chemical rather than only certain specific uses as determined by EPA. In FY 2017, risk evaluations commenced for the first ten chemicals under the new law, and the statutory deadline for completing scoping documents within six months was met for all ten chemicals.

***Additional Information:*** The universe for this measure comprises TSCA Work Plan Chemicals and related/similar chemicals under the previous TSCA law. Zero chemicals had completed risk assessments through FY 2013. All five of the chemicals for which the five risk assessments were completed in FY 2014 and FY 2015 are from the list of 67 TSCA Work Plan Chemicals that was refreshed in October 2014. Background information is available on EPA's website at www.epa.gov/assessing-and-managing-chemicals-under-TSCA.

**(PM 009) Cumulative number of active certified Renovation Repair and Painting firms**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 140,000 | 140,000 | 138,000 | 145,000 | 96,000 | 97,000 | Firms |
| **Actual** | 126,323 | 133,587 | 139,702 | 108,623 | 90,970 | 89,998 | |

***Explanation of Results:*** FY 2017 target not met. In large part this reflects the fact that EPA's Lead Renovation, Repair and Painting Program is reaching the end of the first 5-year cycle of initial certifications and firms have to decide whether to recertify. To date only about 25% of firms have sought recertification. The reasons may include a decision to leave the industry, a shift in business emphasis to new home construction or a lack of local demand for lead safe renovation services. On the other hand, some new renovation firms do continue to emerge and seek certification. The Agency is not aware of an acute shortage of certified lead renovation firms, but that is due in part to lower than expected demand. Within limits of funding and authority, EPA will continue to promote the benefits to consumers of using lead-safe certified renovation firms.

***Additional Information:*** Firms can become certified directly through EPA (tracked through Federal Lead-based Paint Program (FLPP)) or through an authorized state program (tracked through grant reports). FY 2010 was the first year that firms submitted applications to EPA to become certified. Background information is available on EPA's website at www.epa.gov/lead/renovation-repair-and-painting-program.

**(PM 011) Number of Product Reregistration Decisions**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 1,200 | 1,200 | 900 | 600 | 550 | 600 | Decisions |
| **Actual** | 1,255 | 709 | 292 | 562 | 306 | 255 | |

***Explanation of Results:*** EPA continued to face constraints on resources, including hiring constraints and Pesticide Registration Improvement Act (PRIA) science reviews taking precedence over reviewing reregistration submissions. By FY 2017, a total of 20,605 product registration decisions were made.

***Additional Information:*** By FY 2012, a total of 18,208 product re-registrations decisions were made according to internal tracking as part of the product reregistration process. The product reregistration universe is 24,975. Product reregistration is for products that are already registered and therefore available in the market. Missing the target will delay labeling and use changes EPA has prescribed (typically toward more restrictive use) but will have little effect on a product's market availability. Additional information is available on https://www.epa.gov/pesticide-reevaluation/reregistration-and-other-review-programs-predating-pesticide-registration#Product.

**(PM 091) Percent of decisions completed on time (on or before PRIA or negotiated due date).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 99 | 99 | 97.0 | 96 | 96 | 97 | Percent |
| **Actual** | 99.1 | 98.8 | 85 | 98.4 | 99 | 99 | |

***Explanation of Results:*** The calculation for this measure is based on 18 late completions out of 2,021 PRIA decisions completed in FY 2017.

***Additional Information:*** Annual average percentage of decisions completed on time from FY 2010-2012 was 99.0% according to EPA internal data. More information on PRIA can be found on https://www.epa.gov/pria-fees/pria-overview-and-history.

**(PM 10A) Annual percentage of lead-based paint certification and refund applications that require less than 20 days of EPA effort to process.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 95 | 95 | 95 | 95 | 95 | 95 | Percent |
| **Actual** | 97 | 99 | 100 | 99 | 99 | 100 | |

***Explanation of Results:*** In FY 2017, EPA processed all 1,746 lead-based paint certification and refund applications within 20 days of receipt. Continued exceedance of this target reflects years of concerted and successful efforts to expedite handling of abatement individual certification and refund applications, ensuring that homeowners will have access to a sufficient pool of qualified abatement professionals to perform lead inspections, risk assessments and abatement work.

***Additional Information:*** Data are obtained from Federal Lead Based Paint Program (FLPP) information system. Lead-based paint certification and refund applications are applications received by EPA from firms for certification to perform lead-based paint activities or renovation, repair and painting work; or from individuals for certification as risk assessor, inspector, abatement supervisor or abatement worker. In addition, EPA receives accreditation applications from training providers to provide training in lead-based paint disciplines and for renovator and dust sampling technician work. Applications for refunds of certification fees are sometimes received by EPA from these same sources (for example, if an application was mistakenly sent twice or an incorrect discipline requested).

**(PM 143) Percentage of agricultural acres treated with reduced-risk pesticides.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 22 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | Percent |
| **Actual** | 22.5 | 23 | 23 | 22 | Data Avail 10/2018 | Data Avail 10/2019 | |

***Explanation of Results:*** FY 2015 result due to a relatively small revision (7 million acres) in the usage estimates for conventional and reduced risk acre treatments. FY 2015 result calculation – 406 million agricultural reduced risk acre treatments / 1,821 million total agricultural acre treatments.

***Additional Information:*** Percentage of acres treated with reduced-risk pesticides was 22% of total acreage in FY 2011 when the reduced-risk pesticide acre-treatments was 315 million and total (all pesticides) was 1,444 million acre-treatments. Each year's total acre-treatments, as reported by USDA National Agricultural Statistic Service and private marketing research data sources, serve as the basis for computing the percentage of acre-treatments using reduced risk pesticides. Acre-treatments count the total number of pesticide treatments each acre receives each year. Results are reported the end of the calendar year and have a one-year reporting data lag. Most reduced-risk acre treatments are Bt (Bacillus thuringiensis) corn and cotton and the use of glyphosate and others in field crops. Bt corn is a variant of maize that has been genetically altered to express one or more proteins from the bacterium Bt (a built in pesticide).

**(PM 164) Number of pesticide registration review dockets opened.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 70 | 72 | 73 | 73 | 66 | 25 | Dockets |
| **Actual** | 79 | 77 | 75 | 84 | 88 | 25 | |

***Explanation of Results:*** All 725 pesticide cases currently going through registration review have completed their docket opening milestones.

***Additional Information:*** By FY 2012, a total of 376 chemical case work dockets were opened according to EPA internal data.

**(PM 230) Number of pesticide registration review final work plans completed.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 70 | 72 | 73 | 73 | 75 | 40 | Work Plans |
| **Actual** | 70 | 79 | 81 | 89 | 78 | 41 | |

***Explanation of Results:*** A total of 695 final work plans of a universe of 725 for pesticide cases currently going through registration review were completed according to EPA internal data (program has completed all final work plans).

***Additional Information:*** By FY 2012, a total of 327 final work plans for registered pesticides were completed according to EPA internal data.

**(PM 247) Percent of new chemicals or organisms introduced into commerce that do not pose unreasonable risks to workers, consumers, or the environment.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 100 | 95 | 96 | 99 | Data Avail 10/2018 | |

***Explanation of Results:*** Measure subject to one-year reporting lag due to the need for completion and review of the annual contractor report.

***Additional Information:*** Percent of new chemicals or organisms introduced into commerce that do not pose unreasonable risks to workers, consumers, or the environment was 97 percent over the period FY 2009-2012, as determined by averaging the annual performance results for this measure. Data obtained from the annual report, "Study Comparing Premanufacture Notices (PMNs)/Low Volume Exemptions (LVEs) to Related 8(e) Chemicals." Results are calculated by comparing Section 8(e) notices received in the fiscal year to previously reviewed PMNs. If a risk identified in a new Section 8(e) notice would not have been identified and mitigated by the review, then the program has not met the performance target. Approximately 30 Section 8(e) notices submitted annually are compared to previous PMNs for purposes of determining the annual performance result for this measure. Background information is available on EPA's website at www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca.

**(PM 998) EPA's TRI program will work with partners to conduct data quality checks to enhance accuracy and reliability of environmental data.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | 500 | 500 | 600 | 600 | 600 | Quality Checks |
| **Actual** | | 600 | 600 | 600 | 775 | 1,090 | |

***Explanation of Results:*** In FY 2017, EPA augmented its usual data quality check procedures by running a comparison of Toxics Release Inventory (TRI) data with Risk Management Program (RMP) data for reporting years 2012-2015. Unexpectedly, a very large number of facilities (approximately 1,000) with potential data quality issues were identified through this comparison, and as a result, the FY 2017 target of 600 data quality checks was significantly exceeded.

***Additional Information:*** TRI data checks improve the accuracy and reliability of environmental data. More than 21,000 facilities report to EPA's TRI Program annually. The universe of facilities subject to the TRI reporting requirements includes all federal facilities (pursuant to Executive Order) that meet the applicability criteria described in part 372, subpart B of Title 40 of the Code of Federal Regulations and, with some exceptions and/or limitations, facilities that are classified within (under) any of the specific North American Industrial Classification System (NAICS) codes that correspond to Standard Industrial Classification (SIC) codes: 10, 20-39, 4911, 4931, 4939, 4953, 5169, 5171, and 7389.

**(PM C19) Percentage of CBI claims for chemical identity in health and safety studies reviewed and challenged, as appropriate, as they are submitted.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 100 | 100 | 100 | 100 | N/A | |

***Explanation of Results:*** The TSCA amendments of June 2016 included significant new requirements relating to Confidential Business Information (CBI) review for both EPA and submitters. Upon enactment of the new CBI requirements, EPA discontinued the prior CBI review activities reflected in this measure and began implementation of the new CBI requirements. In response to the new TSCA law's stringent new requirements for substantiation of CBI claims, EPA gave submitters additional time to substantiate claims submitted between June 22, 2016 and March 21,2017; as a result, the Agency was not able to complete its review of all FY 2017 CBI cases by the end of the fiscal year. Additionally, because the new law no longer requires EPA to distinguish between CBI cases with health and safety studies and those without them, EPA is unable to track and report CBI review data in a manner that conforms to the specific wording of this measure. Thus, CBI review outputs for FY 2017 cannot be meaningfully compared to prior year results, given the significant differences between the old and new requirements. In FY 2017, EPA received 845 cases with CBI claims for chemical identity (with or without health and safety studies), completed review of 481 of these and is continuing review of the other 364 cases.

***Additional Information:*** Effective CBI review ensures that incoming claims are approved only where warranted and that all non-CBI data from health and safety studies are made available to the public. Approximately 500 TSCA CBI claims are submitted per year for chemical identity, which potentially contain health and safety studies.

**(PM E07) Annual number of EDSP Tier 1 screening assays for which validated alternatives have been developed, based on high throughput assays and computational models.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | | 2 | 2 | Assays and Tools |
| **Actual** | | | | | 3 | 0 | |

***Explanation of Results:*** The availability of the two additional validated alternatives to the traditional EDSP Tier 1 screening assays were delayed due to the rescheduled July 2017 Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel (FIFRA SAP) meeting. The FIFRA SAP meeting is an important step in the validation of the alternative assays.

***Additional Information:*** In FY 2014, there were zero (of the 11) Tier 1 assays for which validated alternatives had been developed, based on high throughput assays and computational models.

**(2) Protect Ecosystems from Chemical Risks**

**(PM 268) Percent of selected urban watersheds that exceed EPA aquatic life benchmark maximum concentrations for three key pesticides of concern (diazinon, chlorpyrifos and carbaryl).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 5, 0, 10 | No Target Established | 0, 0, 0 | No Target Established | 0, 0, 0 | No Target Established | Percent |
| **Actual** | 0, 0, 9 | Biennial | 7, 0, 0 | Biennial | 0,0,9 | Biennial | |

***Explanation of Results:*** No reporting; Biennial year.

***Additional Information:*** Urban watersheds are sampled by the USGS National Water Quality Assessment (NAWQA) program. Data for this measure are reported biennially. The number of sampling and the sampling points in USGS data were constantly changing year to year, depending on their funding. Results from previous reports showed that the exceedances were at different monitoring sites. Starting in FY 2015, the Agency is using data from 10 specified urban sites from the USGS national monitoring sites in the future to provide consistency in data reporting. The monitoring sites were selected based on history of monitoring results, and anticipated consistency in reporting from these national sampling sites. The 10 selected Urban Streams in National Network sites are: Norwalk River at Winnipauk, CT; Accotink Creek near Annandale, VA; Swift Creek near Apex, NC; Sope Creek near Marietta, GA; Clinton River at Sterling Heights, MI; Shingle Creek at Minneapolis, MN; Cherry Creek at Denver, CO; White Rock Creek at Dallas, TX; Little Cottonwood Creek at Salt Lake City, UT; Fanno Creek at Durham, OR. The exceedances are calculated based on the number of exceedances divided by the total number of watersheds. The USGS NAWQA sites selected are the best long term source of surface water monitoring data for a large number of pesticides and their degradates, with consistent QA procedures for both sampling and lab analysis, low detection limits, and have been used by EPA for risk assessment work for over the last 15 years. The most sensitive aquatic benchmark for the chemical are posted on the website: http://www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm: Diazinon: 0.105 ug/L; Chlorpyrifos: 0.040 ug/L; Carbaryl: 0.5 ug/L.

**(PM 269) Percent of selected agricultural watersheds that exceed EPA aquatic life benchmark maximum concentrations for two key pesticides of concern (azinphos-methyl and chlorpyrifos).**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 0, 10 | No Target Established | 0, 0 | No Target Established | 0, 0 | No Target Established | Percent |
| **Actual** | 7, 7 | Biennial | 0, 0 | Biennial | 0,0 | Biennial | |

***Explanation of Results:*** No reporting; Biennial year.

***Additional Information:*** Agricultural watersheds are sampled by the USGS National Water Quality Assessment (NAWQA) program. Data for this measure are reported biennially. The number of sampling and the sampling points in USGS data were constantly changing year to year, depending on their funding. Results from previous reports showed that the exceedances were at different monitoring sites. Starting in FY 2015, the Agency is using data from 10 specified agricultural sites from the USGS national monitoring sites in the future to provide consistency in data reporting. The monitoring sites were selected based on history of monitoring results, and anticipated consistency in reporting from these national sampling sites. The 10 selected Agricultural Streams in National Network sites are: Canajoharie Creek near Canajoharie, NY; Contentnea Creek at Hookerton, NC; South Fork Iowa River near New Providence, IA; Maple Creek near Nickerson, NE; Bogue Phalia near Leland, MS; Orestimba Creek near Crows Landing, CA; Granger Drain at Granger, WA; Rock Creek at Twin Falls, ID; Zollner Creek near Mt. Angel, OR; Sugar Creek at New Palestine, IN. The exceedances are calculated based on the number of exceedances divided by the total number of watersheds. The USGS NAWQA sites selected are the best long term source of surface water monitoring data for a large number of pesticides and their degradates, with consistent QA procedures for both sampling and lab analysis, low detection limits, and have been used by EPA for risk assessment work for over the last 15 years. The most sensitive aquatic benchmark for the chemical are posted on the website: http://www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm: Malathion=0.035 ug/L; Methomyl=0.7 ug/L.

**(PM 240) Maintain timeliness of FIFRA Section 18 Emergency Exemption Decisions**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 45 | 45 | 45 | 45 | 45 | 45 | Days |
| **Actual** | 43 | 27 | 44 | 45 | 48 | 40 | |

***Explanation of Results:*** The 45-day annual target is an historical average. The end-of-year measure reduction was attributed to Section 18 cases involving multiple renewals, re-certifications, and crisis exemptions that allowed for shorter turnaround times.

***Additional Information:*** Section 18 of FIFRA authorizes EPA to allow an unregistered use of a pesticide for a limited time if it is determined that an emergency condition exists (i.e. a serious pest problem which jeopardizes production of agricultural goods or public health). Average number of days for Section 18 decisions from FY 2009-2012 was 46 days, according to EPA internal data.

**(PM 276) Percent of registration review chemicals with identified endangered species concerns, for which EPA obtains any mitigation of risk prior to consultation with DOC and DOI.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 5 | 5 | 15 | 5 | 5 | 65 | Percent |
| **Actual** | 0 | 0 | 0 | 65 | 80 | 97 | |

***Explanation of Results:*** The program anticipated exceeding the target based on empirical data from Q1 of FY 2017 which indicated an increasing trend in the percentage of registration review chemicals with identified endangered species concerns for which EPA obtains any mitigation prior to consultation with the Services (U.S. Fish and Wildlife Service (FWS) and the U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service). The numbers are increasing as we are in the stage of registration review where more interim decisions are being made. (The number of registration review chemicals for which the ecological risk assessment and/or effects determination identifies endangered species concerns and for which mitigation of risk is obtained prior to consultation with the Services within a given reporting year) / (The total number of registration review chemicals for which the ecological risk assessment and/or effects determination identifies endangered species concerns within the same reporting year) x 100 for FY 2017 is: (38/39)*100 = 97.

***Additional Information:*** The data are tracked internally by EPA. The data are obtained from ecological risk assessments and effects determinations prepared to support a registration review case. Any mitigation of risk refers to label changes that are intended to reduce the environmental exposure and associated risk of pesticides to listed species and/or their designated critical habitat. This may include such mitigation measures as reduction in the pesticide application rate and/or frequency of application, changes to the timing of application, spray drift, buffers or more geographically specific mitigation measures via EPA's Bulletins Live! Two web-based tool in specific areas where listed species and/or critical habitat are known to co-occur with potential pesticide use based on labeled registered uses.

| |
|---|
| **Objective 2 - Promote Pollution Prevention:** Conserve and protect natural resources by promoting pollution prevention and the adoption of other sustainability practices by companies, communities, governmental organizations, and individuals |
| **Summary of progress toward strategic objective:**<br>EPA continued to make better than expected progress in its Safer Choice Program, recognizing 226 additional products brought under the Safer Choice label in FY 2017, nearly double the target, and meeting the target for chemicals added to the Safer Chemical Ingredients List. Following a multi-stakeholder pilot, EPA assessed and recommended product environmental performance standards and ecolabels for federal procurement covering 21 product categories from computers to cleaners to carpeting. Additionally, EPA conducted more than 1,131 facility assessments of small and medium-sized businesses through the Energy, Environment and Economy (E3) Initiative and the Green Suppliers Network (GSN) Program. In FY 2016 (data became available in FY 2017), EPA reached a new high in achieving cost savings through pollution prevention efforts, helping businesses and governments save over $842 million. |
| **Challenges:**<br>EPA continues to explore options for more fully capturing the environmental benefits of pollution prevention activities through performance measures. Recent progress includes surveying consumers to assess recognition and impact (purchasing influence) of the Safer Choice Products label introduced in 2015. While the survey showed progress (76% of consumers responded that they would use the Safer Choice label to inform purchasing decisions; 83% and 86% for parents and millennials respectively), the Agency continues work to draw on such information as well as actual purchasing/sales data to support its analysis (see Measure PM P2X below). |

| Program Area | Performance Measures and Data |
|---|---|
| **(1) Promote Pollution Prevention** | **(PM 264) Pounds of hazardous materials reduced through pollution prevention.** |

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 88.7 | 71.6 | 23.4 | 204.2 | 214.2 | 214.2 | Pounds (Millions) |
| **Actual** | 214.9 | 231.5 | 190.3 | 205.2 | 283.1 | Data Avail 10/2018 | |

***Explanation of Results:*** EPA's consistent record of exceeding annual targets for this measure reflects successful implementation of the P2 grant program and positive experience in developing product standards for electronics. Grant-based technical assistance to businesses stays up to date on effective "greening" operations and measurement of impacts; Electronic Product Environmental Assessment Tool (EPEAT) product standards and registered products maintain a steady increase as sales data continue to rise.

***Additional Information:*** There is a one-year data lag. From FY 2008 through FY 2012, 1,437 million pounds were reduced—after removing 626 million pounds in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2016, EPA reported "recurring results" of an additional 76 million pounds of hazardous materials reduced. "Recurring results" are benefits produced in prior years that continue to deliver benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the P2 Program, there is not a fixed standard number of years that results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities. Background information also is available on EPA's website at www.epa.gov/p2.

**(PM 297) Metric Tons of Carbon Dioxide Equivalent (MTCO2Eq) reduced or offset through pollution prevention.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 1.74 | 1.46 | 1.0 | 2.0 | 2.2 | 2.2 | MTCO2Eq (Millions) |
| **Actual** | 3.9 | 3.4 | 3.0 | 3.16 | 4.32 | Data Avail 10/2018 | |

***Explanation of Results:*** EPA's consistent record of exceeding annual targets for this measure reflects successful implementation of the P2 grant program and positive experience in developing product standards for electronics. Grant-based technical assistance to businesses stays up to date on effective "greening" operations and measurement of impacts; EPEAT product standards and registered products maintain a steady increase as sales data continue to rise.

***Additional Information:*** There is a one-year data lag. From FY 2008 through FY 2012, 11.1 Million Metric Tons of Carbon Dioxide Equivalent (MMTCO2e) were reduced—after removing 3.5 MMTCO2e in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2016, EPA reported "recurring results" of an additional 2.6 MMTCO2e reduced. "Recurring results" are benefits produced in prior years that continue to deliver benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the P2 Program, there is not a fixed standard number of years that results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities. Background information also is available on EPA's website at www.epa.gov/p2.

**(PM 262) Gallons of water reduced through pollution prevention.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 785 | 771 | 932 | 1,156 | 1,390 | 1,390 | Gallons (Millions) |
| **Actual** | 1,175 | 936 | 1,618 | 1,433 | 1,036 | Data Avail 10/2018 | |

***Explanation of Results:*** Performance on this measure declined in FY 2016 toward the low end of the six-year range (FY 2011-2016). P2 implementation steps vary from year to year in programmatic impact and consequently affect relative performance among the four P2 outcome measures.

***Additional Information:*** There is a one-year data lag. From FY 2008 through FY 2012, 6.9 billion gallons were reduced--after removing 24 billion gallons in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2016, EPA reported "recurring results" of an additional 3.9 billion gallons of water reduced. "Recurring results" are benefits produced in prior years that continue to deliver benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the P2 Program, there is not a fixed standard number of years that results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities. Background information also is available on EPA's website at www.epa.gov/p2.

**(PM 263) Business, institutional and government costs reduced through pollution prevention.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 196.9 | 195.6 | 133.3 | 362.6 | 445.6 | 445.6 | Dollars Saved (Millions) |
| **Actual** | 737.4 | 594.9 | 587.5 | 609 | 842.3 | Data Avail 10/2018 | |

***Explanation of Results:*** EPA's consistent record of exceeding annual targets for this measure reflects successful implementation of the P2 grant program and positive experience in developing product standards for electronics. Grant-based technical assistance to businesses stays up to date on effective "greening" operations and measurement of impacts; EPEAT product standards and registered products maintain a steady increase as sales data continue to rise.

***Additional Information:*** There is a one-year data lag. From FY 2008 through FY 2012, $1.85 billion were saved—after removing $231 million in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2016, EPA reported "recurring results" of an additional $277 million dollars saved. "Recurring results" are benefits produced in prior years that continue to deliver benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the P2 Program, there is not a fixed standard number of years that results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities. Background information also is available on EPA's website at www.epa.gov/p2.

**(PM P2X) Annual Number of Additional Products Recognized by the Safer Choice program**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | | | 375 | 100 | 125 | Product |
| **Actual** | | | | 101 | 248 | 226 | |

***Explanation of Results:*** The increase in safer products, similar to last year's total, can be attributed to continued strong interest in the program among corporate partners and the value they place in the Safer Choice label.

***Additional Information:*** Approximately 2,500 safer chemical products were recognized in FY 2013 by the Safer Choice Program. The number of products placed on the Safer Choice Products list in FY 2014 was 171. The total number of products certified is affected by consolidation in the industry and other factors that would make it less useful as a measure of performance. The Safer Choice program is also in the process of developing data and other market research on actual purchasing, to track changes (increases) in volume and aggregate value of purchases of Safer Choice labeled products, in particular product sectors, relative to growth/changes in overall purchasing for that market segment (e.g., laundry detergents, all-purpose cleaners). Early indications are that Safer Choice may be performing well in product category markets where Safer Choice products are available. More information about the Safer Choice program, including currently recognized products and the criteria manufacturers must meet to be recognized, is available at www.epa.gov/saferchoice.

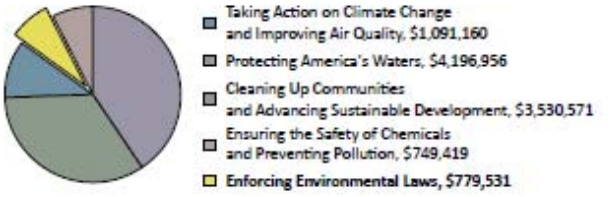
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **(PM P2Y) Annual Number of Additional Chemicals Added to the Safer Chemical Ingredients List** | | | | | | |
| | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| **Target** | | | | 100 | 100 | 100 | Chemicals |
| **Actual** | | | | 77 | 100 | 100 | |
| | ***Additional Information:*** Approximately 600 chemicals were on the Safer Chemical Ingredients List in FY 2013 under the Safer Choice Program. The number of products placed on the Safer Chemicals Ingredients List in FY 2014 was 49. The total number of chemicals on the Safer Chemicals Ingredients List is affected by consolidation in the industry and other factors that would make it less useful as a measure of performance. More information about the Safer Chemical Ingredients List, including currently listed chemicals and criteria for listing, is available at http://www2.epa.gov/saferchoice/safer-ingredients. | | | | | | |

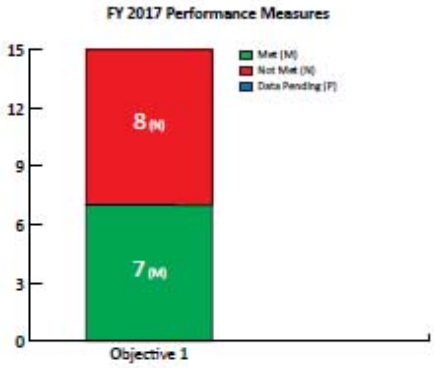
# Goal 5 at a Glance

## PROTECTING HUMAN HEALTH AND THE ENVIRONMENT BY ENFORCING LAWS AND ASSURING COMPLIANCE

*Protect human health and the environment through vigorous and targeted civil and criminal enforcement. Use Next Generation Compliance strategies and tools to improve compliance with environmental laws.*

**FY 2017 Performance Measures**
Met: 7 Not Met: 8 Data Unavailable: 0
(Total Measures: 15)




| Strategic Objective Overview | FY 2016 Obligations* | % of Goal 5 Funds |
|---|---|---|
| **Objective 5.1: Enforce Environmental Laws to Achieve Compliance.** Pursue vigorous civil and criminal enforcement that targets the most serious water, air, and chemical hazards in communities to achieve compliance. Assure strong, consistent and effective enforcement of federal environmental laws nationwide. Use Next Generation Compliance strategies and tools to improve compliance and reduce pollution. | $779,531 | 100.0% |
| **Goal 5 Total** | $779,531 | 100.0% |

*All figures in thousands

## FY 2016 EPA Programs and Activities Contributing to Goal 5

Compliance Assistance Program
Economic Decision Sciences Research
Environmental Justice
Environmental Technology Verification Program, Monitoring and Enforcement Program
National Center for Environmental Innovation
National Partnership for Environmental Priorities
Pesticide Enforcement Grant Program
RCRA Corrective Action
Sector Grant Program
Superfund Enforcement
Sustainability Research
Sustainable Materials Management
Toxic Substances Compliance Grant Program

## GOAL 5: PROTECTING HUMAN HEALTH AND THE ENVIRONMENT BY ENFORCING LAWS AND ASSURING COMPLIANCE

Protect human health and the environment through vigorous and targeted civil and criminal enforcement. Use Next Generation Compliance strategies and tools to improve compliance with environmental laws.

**Objective 1 - Enforce Environmental Laws to Achieve Compliance:** Pursue vigorous civil and criminal enforcement that targets the most serious water, air, and chemical hazards in communities to achieve compliance. Assure strong, consistent, and effective enforcement of federal environmental laws nationwide. Use Next Generation Compliance strategies and tools to improve compliance and reduce pollution.

**Summary of progress toward strategic objective:**

In FY 2017, EPA – in cooperation with its state, tribal, and local partners – made steady progress towards its objective of pursuing the most serious water, air, and chemical hazards within communities. EPA achieves such progress by focusing on the highest impact environmental problems through the National Enforcement Initiatives (NEIs), other national priorities (e.g., drinking water, Superfund, etc.), and Regional enforcement priorities. EPA's actions compel facilities to clean up contaminated sites and install pollution control technologies, resulting in health and environmental benefits. Specifically, in FY 2017, EPA met and/or exceeded 7 of its 15 annual performance metrics. Notably, the Agency's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) corrective action cases resulted in approximately 400 million cubic yards of total contaminated soil and water to be cleaned up, and concluded enforcement actions led to the reduction, treatment, or elimination of 10.9 million pounds of toxic and pesticide pollutants. EPA's focused case work on the most significant violations led to a record settlement against Volkswagen for violations of the Clean Air Act that resulted in approximately $17.6B in remedies and $4.3B in civil and criminal penalties. The Agency also achieved a record settlement against two affiliated subsidiaries of Freeport-McMoRan Inc., that provides for the cleanup of 94 abandoned uranium mines on the Navajo Nation, valued at over $600 million, the 8th largest settlement for the Superfund enforcement program to date.

EPA's criminal enforcement program also made strong progress in FY 2017, with a criminal conviction rate of 89 percent. Also in FY 2017, significant cases often were tied to individual conduct, and that conduct resulted in 153 years of incarceration, $2.8 billion in fines to be paid by individuals and corporations, $147 million in restitution, and $3 million in court ordered environmental projects. As part of EPA's commitment to protect vulnerable communities from environmental crimes, in FY 2017 the Agency's work directly led to the sentencing of several defendants, including a former Cleveland Housing Network official, for bribery, kickbacks, and illegal abatement of lead-based paint in low-income housing. Aside from this progress however, some of the Agency's FY 2017 enforcement program measures faced challenges, contributing to missed targets for the number of federal inspections and evaluations, civil judicial and administrative cases initiated and concluded, and pounds of air, water, and hazardous waste pollutants reduced.

In addition to enforcement, EPA also used other effective compliance assurance tools to promote compliance, and worked to enhance state and tribal partnerships in furtherance of cooperative federalism. For example, EPA, with the Environmental Council of the States (ECOS), launched a workgroup to strengthen state-EPA compliance assurance work. The Agency also sought to engage partners and stakeholders to reinvigorate Superfund cleanups by developing (and now implementing) 42 EPA Task Force recommendations to accelerate the cleanup and reuse of Superfund sites. Furthermore, EPA's 17 virtual compliance assistance web sites, designed to help businesses, colleges and universities, local governments, tribes and federal facilities understand and comply with environmental requirements and save money through pollution prevention techniques, had more than 2 million visits in FY 2017. In addition, EPA partnered with a number of states to address a variety of serious RCRA, Clean Water Act (CWA), and Clean Air Act (CAA) violations throughout FY 2017 and ultimately split penalties from enforcement cases with many co-plaintiff states, including Louisiana (Innophos: $1.4M), West Virginia (Pikewood: $1.8M), and Texas (Vopak: $2.5M, and City of Tyler: $563,000).

**Challenges:**
Aside from this progress however, funding challenges, combined with normal year-to-year variability in results obtained from enforcement case conclusions, affected some of the Agency's FY 2017 enforcement program measures, contributing to missed targets for eight of the EPA's Office of Enforcement and Compliance Assurance's (OECA's) 15 annual performance metrics. Competing priorities have contributed to delays in data system modernizations, adoption of advanced monitoring, and has hindered EPA's progress on E-discovery.

Advanced monitoring technology and information technology are rapidly evolving, and advances in these fields offer great opportunities for improving the ability of EPA, states, and tribes to ensure compliance. EPA, states, and tribes face challenges in keeping up with the rapid pace of change in these technologies, especially when experiencing resource constraints. The Agency will continue to collaborate with ECOS and state associations to maximize the use of these technologies and modernize programs. For example, EPA will work with states and academics to pilot and evaluate innovative compliance methods (ECOS Resolution 17-2). EPA will work with states to integrate advanced pollution monitoring and information technology into Agency work.

<table>
<tr><th>Program Area</th><th colspan="8">Performance Measures and Data</th></tr>
<tr><td rowspan="8">(1) Maintain Enforcement Presence</td><td colspan="8">(PM 409) Number of federal inspections and evaluations.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>19,000</td><td>17,000</td><td>17,000</td><td>15,500</td><td>15,500</td><td>14,000</td><td rowspan="2">Inspections/Evaluations</td></tr>
<tr><td>Actual</td><td>20,000</td><td>18,000</td><td>16,000</td><td>15,400</td><td>13,500</td><td>11,800</td></tr>
<tr><td colspan="8">Explanation of Results: Inspections are an integral part of EPA's enforcement and compliance assurance program. They are an important tool for officially assessing compliance with environmental requirements. EPA is prioritizing the most significant inspections and evaluations and that has caused the overall number of federal inspections to decrease. EPA also conducts off-site evaluations of facilities that are not historically counted as part of this measure.</td></tr>
<tr><td colspan="8">(PM 410) Number of civil judicial and administrative enforcement cases initiated.</td></tr>
<tr><td></td><td>FY 2012</td><td>FY 2013</td><td>FY 2014</td><td>FY 2015</td><td>FY 2016</td><td>FY 2017</td><td>Unit</td></tr>
<tr><td>Target</td><td>3,300</td><td>3,200</td><td>3,200</td><td>2,700</td><td>2,700</td><td>2,700</td><td rowspan="2">Cases</td></tr>
<tr><td>Actual</td><td>3,000</td><td>2,400</td><td>2,300</td><td>2,400</td><td>2,400</td><td>1,900</td></tr>
<tr><td colspan="8">Explanation of Results: EPA continued to pursue larger more complex, risk-based enforcement cases. This strategy leads to significant environmental and health gains, but generally lower numbers of cases overall. These enforcement actions are initiated when the regulated community does not comply with environmental laws, or cleanup is required for the protection of public health and the environment.</td></tr>
</table>

**(PM 411) Number of civil judicial and administrative enforcement cases concluded.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 3,200 | 3,000 | 2,800 | 2,400 | 2,400 | 2,400 | Cases |
| **Actual** | 3,000 | 2,500 | 2,300 | 2,400 | 2,400 | 2,000 | |

***Explanation of Results:*** EPA continued to pursue larger more complex, risk-based enforcement cases. This strategy leads to significant environmental and health gains, but generally lower numbers of cases overall.

**(PM 412) Percentage of open consent decrees reviewed for overall compliance status.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 91 | 91 | 100 | 99 | 100 | 100 | |

**(PM 078) Percentage of all Superfund statute of limitations cases addressed at sites with unaddressed past Superfund costs equal to or greater than $500,000.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 100 | 100 | 100 | 100 | 98 | |

***Explanation of Results:*** The FY 2017 result is slightly lower than the target due to past costs not being addressed before the statute of limitations (SOL) at one Superfund site. The sole liable party at the site was determined by the Region to have an inability to pay EPA's unreimbursed past costs, so these past costs were written off as unrecoverable. Although the costs were written off after the SOL expired, there was no loss to the Fund due to the responsible parties' inability to pay, which is documented in the site file.

**(PM 285) Percentage of Superfund sites having viable, liable responsible parties other than the federal government where EPA reaches a settlement or takes an enforcement action before starting a remedial action.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 99 | 99 | 99 | 99 | 99 | 99 | Percent |
| **Actual** | 100 | 100 | 100 | 100 | 100 | 100 | |

***Additional Information:*** EPA's enforcement program is based on the "polluter pays" principle, which provides that a party responsible for the pollution pays for cleaning it up. The enforcement program applies this principle to preserve taxpayer dollars and the scarce resources of the Superfund trust fund to address truly abandoned and orphaned sites, which helps to make a visible difference in communities around the country by maximizing Superfund cleanups. EPA enforcement works to ensure that a settlement is reached or an enforcement action is taken at sites with liable, viable responsible parties prior to the start of new remedial cleanup work at Superfund sites (excluding federal facilities).

**(2) Support Addressing Climate Change and Improving Air Quality**

**(PM 400) Millions of pounds of air pollutants reduced, treated, or eliminated through concluded enforcement actions.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 480 | 450 | 350 | 310 | 310 | 240 | Million Pounds |
| **Actual** | 250 | 610 | 140 | 430 | 240 | 70 | |

***Explanation of Results:*** Results for this measure are highly variable from year to year because they are driven by a small number of very large cases. This results in substantial variability from year to year.

***Additional Information:*** As OECA continues to make progress addressing large air pollution violators, such as utilities, OECA's annual enforcement actions comprise cases with significant public health impacts but a smaller number of pounds of pollution. We are increasingly focused on large sources of air toxics, where even small emissions reductions can have significant health benefits. We would therefore expect to see pounds reduced results go down in future years, as a combined result of success in addressing the largest sources and a greater focus on toxic air pollutants.

**(3) Support Protecting America's Waters**

**(PM 402) Millions of pounds of water pollutants reduced, treated, or eliminated through concluded enforcement actions.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 320 | 320 | 280 | 250 | 250 | 200 | Million Pounds |
| **Actual** | 500 | 660 | 340 | 90 | 70 | 130 | |

***Explanation of Results:*** Results for this measure are highly variable from year to year because they are driven by a small number of very large cases. This results in substantial variability from year to year.

***Additional Information:*** As we complete work on compliance agreements with the largest cities and begin to address non-compliance in smaller cities, the total pounds of pollution achieved per case is expected to decline. This reduction will be a combined result of addressing some of the largest and most serious violations and putting those dischargers on a path to remediation, as well as our focus on other sources of water pollution that are smaller in number of pounds but very important to protecting water quality.

**(4) Support Cleaning Up Communities and Advancing Sustainable Development**

**(PM 405) Millions of pounds of hazardous and non-hazardous wastes reduced, treated, or eliminated through concluded enforcement actions.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 6,500 | 6,000 | 5,000 | 2,400 | 2,400 | 2,000 | Million Pounds |
| **Actual** | 4,400 | 150 | 700 | 500 | 61,900 | 250 | |

***Explanation of Results:*** Hazardous: 245 M lbs. Non-Hazardous: 1 M lbs. The results for this measure are driven by a small number of very large cases and, therefore, can cause significant fluctuations in the results from year to year. For example, in FY 2016 over 98% of the total 61.9 billion pounds of hazardous and non-hazardous waste reduced, treated, or eliminated came from one case - Mosaic (61.7). Given the types of cases that are nearing completion, OECA's shift in focus is expected to result in many fewer millions of pounds of pollution reduced overall.

***Additional Information:*** Prior to FY 2016, this measure only included hazardous waste. Beginning in FY 2016, this measure reports (separately) both hazardous and non-hazardous waste subtotals addressed and remediated through EPA enforcement actions. Non-hazardous waste subtotals were previously included in PM 404.

**(PM 417) Millions of cubic yards of contaminated soil and groundwater media EPA has obtained commitments to clean up as a result of concluded CERCLA and RCRA corrective action enforcement actions.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 300 | 275 | 225 | 200 | 200 | 200 | Million Cubic Yards |
| **Actual** | 400 | 750 | 900 | 70 | 190 | 400 | |

***Explanation of Results:*** Results for this measure are highly variable from year to year because they are driven by a small number of very large cases. The significant exceedance of this measure's target in FY 2017 is primarily the result of three very large concluded CERCLA cases: Omega Chemical Co. (200M), Shieldalloy Metallurgical Corp. (119M), and Letterkenny Army Depot (85M).

***Additional Information:*** Contaminated groundwater media, as defined for the Superfund and RCRA corrective action programs, is the volume of physical aquifer (both soil and water) that will be addressed by the response action. The results for this measure are usually driven by a small number of very large cases, which can cause a significant fluctuation in results from year to year depending on the types of cases concluded in any given year.

**(5) Support Ensuring the Safety of Chemicals and Preventing Pollution**

**(PM 404) Millions of pounds of toxic and pesticide pollutants reduced, treated, or eliminated through concluded enforcement actions.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 3.8 | 3.0 | 2.5 | 2.3 | 2.3 | 2.3 | Million Pounds |
| **Actual** | 1,400 | 4.6 | 41 | 10 | 13 | 10.9 | |

***Explanation of Results:*** Results for this measure are highly variable from year to year because they are driven by a small number of very large cases. The significant exceedance of this measure's target in FY 2017 is primarily the result of a few very large concluded cases including ECCO USA (1.7M), Inc., Dow Agrosciences LLC (1.1M), and Fabco Industries, Inc. (800K).

***Additional Information:*** Prior to FY 2016, this measure included non-hazardous wastes. Beginning in FY 2016, non-hazardous wastes addressed and remediated through EPA enforcement actions, which have been reported as part of this measure, are reported as part of PM 405. The results for this measure are usually driven by a small number of very large enforcement cases, which yielded the majority of the pounds addressed and can cause significant fluctuations in results from year to year, depending on the types of cases concluded in any given year.

**(6) Enhance Strategic Deterrence through Criminal Enforcement**

**(PM 418) Percentage of criminal cases having the most significant health, environmental, and deterrence impacts.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 43 | 43 | 43 | 45 | 45 | 45 | Percent |
| **Actual** | 45 | 44 | 48 | 62 | 68 | 72 | |

***Additional Information:*** The mission of EPA's Criminal Enforcement Program is to investigate, help prosecute, and thereby deter the most egregious environmental offenders. The criminal program collects data on a variety of case attributes to evaluate the range, complexity, and quality of our national docket. In 2010, the program developed a case selection methodology to ensure the identification, investigation, and prosecution of cases with significant environmental, human health, and deterrence impact. The data elements used in this tier methodology include information about the human health and environmental impacts, the nature of the pollutant and the release, and the profile and compliance history of the subject(s). Since instituting the tiering system, the percentage of "higher tier" cases has steadily risen.

**(PM 419) Percentage of criminal cases with individual defendants.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 75 | 75 | 75 | 75 | 75 | 75 | Percent |
| **Actual** | 70 | 80 | 87 | 83 | 85 | 90 | |

***Additional Information:*** During the early years of EPA's criminal program, organizational defendants made up approximately 70% of the total defendants charged and individual defendants made up the remaining 30%. By FY 2017, these figures had greatly changed: 90% of cases had an individual charged and 10% were cases where only an organizational defendant(s) was charged.

**(PM 420) Percentage of criminal cases with charges filed.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 40 | 40 | 40 | 45 | 45 | 45 | Percent |
| **Actual** | 44 | 38 | 39 | 38 | 37 | 43 | |

***Explanation of Results:*** EPA's Criminal Enforcement Program has emphasized focusing on more significant cases, which by nature are more complex, lengthy investigations. In the past four years, results for PM 420 have ranged from 37 to 43 percent. During that same period, three factors contributed to significant changes in the open case docket: (1) The number of case-carrying agents declined resulting in fewer cases being opened each year; (2) With the implementation of PM 418 (the case tiering measure), EPA has increased the percentage of criminal cases having the most significant health, environmental, and deterrence impacts (going from 44% to 72% in that same period); (3) As a result, the criminal docket went from over 700 open cases to 410 (down from 475 in 2016).

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **(PM 421) Percentage of conviction rate for criminal defendants.** | | | | | | |
| | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| **Target** | 85 | 85 | 85 | 85 | 85 | 85 | Percent |
| **Actual** | 95 | 94 | 95 | 92 | 94 | 91 | |
| | ***Additional Information:*** While case outcomes fluctuate based on their specific characteristics, as well as the prosecutorial and sentencing decisions made by the U.S. Department of Justice and the federal courts, EPA's Criminal Enforcement Program has maintained a historically high conviction rate for defendants charged with environmental crimes. | | | | | | |

## Research Performance Array

## OFFICE OF RESEARCH AND DEVELOPMENT

**Performance Measures and Data**

**(PM AC1) Percentage of planned research products completed on time by Air, Climate, and Energy research program.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 92 | 87 | 87 | 100 | 100 | |

***Explanation of Results:*** In FY 2017, the Office of Research and Development's (ORD's) Air, Climate and Energy (ACE) research program completed 100% (11 of 11) of its high-priority research products as planned. Included among these products are 27 Federal Reference Method and Federal Equivalent Method designations and modifications. These designations serve as key support to states and localities working towards National Ambient Air Quality Standards (NAAQS) attainment. In addition, ORD supported community level air quality planning by releasing work on the role community characteristics and environmental justice factors play in the relationship between criteria air pollutants and public health events. These products, as well as other ACE products, provide key data and tools needed by individuals, communities, and governmental agencies to prevent and reduce emissions of pollutants, assess effects associated with pollutants and climate change, and make informed decisions to protect public health.

***Additional Information:*** A research product is "a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use." This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

**(PM AC2) Percentage of planned research outputs delivered to clients for use in taking action on climate change or improving air quality.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 77 | 83 | 92 | 74 | 85 | 100 | |

## Performance Measures and Data

***Explanation of Results:*** In FY 2017, ORD's ACE research program completed 100% (6 of 6) of its research outputs. Among these outputs were a series of grantee webinars that focused on disseminating research results, collecting publication and bibliographical information, and synthesizing research results to more effectively transmit scientific findings to partners and stakeholders. In addition, ORD rolled out an updated version of the Community Multiscale Air Quality (CMAQ) modeling system, including improved capabilities for modeling aerosol composition, atmospheric chemistry, scale interactions, and diagnostic analysis. CMAQ uses state-of-the-science air quality modeling techniques to provide near and long-term data to inform NAAQS policymaking. These projects further support EPA's mission of protecting human health and the environment by furthering public outreach, supplementing the regulatory monitoring network to explore local-scale pollution trends, and increasing data available for research purposes.

***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility.

**(PM CS1) Percentage of planned research products completed on time by the Chemical Safety for Sustainability research program.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 100 | 100 | 100 | 100 | 100 | |

***Explanation of Results:*** In FY 2017, ORD's Chemical Safety for Sustainability (CSS) research program completed 100% (15 of 15) of its high-priority research products as planned. Among these products were a series of publications, models and datasets to continue the development of advanced Human Exposure Modeling techniques. This work focused on capturing population variability in consumer product and household exposure sources, which will be used to support decision makers in both Agency and Regional air and chemical programs. ORD also enhanced collaboration and impact for CSS and Predictive Toxicology efforts by promoting interdisciplinary research between EPA scientists and grantees on virtual tissue modeling and computational toxicology. These and other CSS products provide toxicological data and tools needed by individuals, communities, and governmental agencies to prevent and reduce chemical exposure, assess effects associated with pollutants, and make informed decisions to protect public health.

***Additional Information:*** A research product is "a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use." This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products are needed to be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

**(PM CS2) Percentage of planned research outputs delivered to clients and partners to improve their capability to advance the environmentally sustainable development, use, and assessment of chemicals.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 50 | 100 | 100 | 100 | 100 | 100 | |

| Performance Measures and Data |
|---|
| ***Explanation of Results:*** In FY 2017, ORD's CSS research program completed 100% (3 of 3) of its research outputs as planned. These outputs included the demonstration of novel approaches for combining data and models through application in a variety of decision contexts to inform specific EPA chemical evaluation objectives. This output provides examples that enable the EPA to integrate data from any variety of legacy and novel data sources using innovations in computational science and "big data" approaches to make more informed decisions. This and other CSS research outputs empower individuals, communities, and governmental agencies to better evaluate potential risks from chemical exposure and to make more informed, more timely decisions about chemicals with impacts on public health and the environment.<br><br>***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility. |

**(PM HC1) Percentage of planned research products completed on time by the Sustainable and Healthy Communities research program.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 83 | 81 | 100 | 100 | 100 | |

***Explanation of Results:*** In FY 2017, ORD's Sustainable and Healthy Communities (SHC) research program completed 100% (16 of 16) of its high-priority research products as planned. Included among these products was the release of the Decision Analysis for a Sustainable Environment, Economy, and Society (DASEES) tool. This tool provides an environment where communities can build common understanding of complex problems, and then create and evaluate management alternatives through a multi-objective decision analysis. The tool serves as an integrative framework for combined assessment of environmental, economic, and social aspects of a decision problem where there is uncertainty or risk. This product, as well as other SHC products, provides tools and methods that help protect public health at a community level, communicate community environmental risks, and protect the environment.

***Additional Information:*** A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

**(PM HC2) Percentage of planned research outputs delivered to clients, partners, and stakeholders for use in pursuing their sustainability goals.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 50 | 68 | 100 | 50 | 92 | 100 | |

| Performance Measures and Data |
|---|
| ***Explanation of Results:*** One output was delayed from an FY17 delivery to FY18. All other outputs are on schedule.<br><br>***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility. |

**(PM HS1) Percentage of planned research products completed on time by the Homeland Security research program.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 100 | 100 | 100 | 100 | 100 | |

***Explanation of Results:*** In FY 2017, ORD's Homeland Security Research Program (HSRP) completed 100% (4 of 4) of its high-priority research products as planned. Included among these products was a collaboration with the Department of Defense and Department of Homeland Security to advance underground transportation system decontaminations after biological attacks. In addition, ORD completed a pilot scale demonstration of mobile water device treatments for biological agents, which will increase treatment capacity in the event of biological contamination incidents. These products, as well as other HSRP products, supports EPA's mission by providing the data and tools necessary to prepare our communities for the threats of disasters including biological, chemical and radiological attacks.

***Additional Information:*** A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

**(PM HS2) Percentage of planned research outputs delivered to clients and partners to improve their capabilities to respond to contamination resulting from homeland security events and related disasters.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 78 | 100 | 100 | 100 | 100 | 100 | |

| Performance Measures and Data |
|---|
| ***Explanation of Results:*** In FY 2017, ORD's HSRP completed 100% (8 of 8) of its research outputs as planned. Included among these outputs is the Water Network Tool for Resilience (WNTR), which is a new software tool designed to help water utilities measure and improve the resilience of their drinking water systems to disasters. In addition to this, operating procedures were developed to help manufacturers bring to market commercially available robotic cleaners designed to sample Bacillus anthracis (anthrax) spores. These and other HSRP outputs continue to support EPA's ability to respond to potential attacks on our water systems and other potential impacts to human health.<br><br>***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility. |

**(PM RA1) Percentage of planned research products completed on time by the Human Health Risk Assessment research program.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 100 | 88 | 80 | 45 | 68 | 85 | |

***Explanation of Results:*** In FY 2017, ORD's Human Health Risk Assessment (HHRA) Research Program completed 85% (11 of 13) of its high priority research products as planned. The Integrated Risk Information System (IRIS) pipeline was delayed, and a decision was made to sunset two products. As an alternative, new, more relevant and responsive replacement products were proposed. Key assessment products completed for HHRA include three IRIS Assessment Plans (nitrate/nitrite, chloroform, and ethylbenzene) and two external review drafts for IRIS assessments (ethyl tert-butyl ether, tert-butanol). Several Integrated Science Assessment (ISA) key products were completed as planned including the second draft ISA for Oxides of Sulfur – Health Criteria, the ISA chapter in the Final Integrated Review Plan (IRP) for the Secondary NAAQS for ecological effects of oxides of nitrogen, oxides of sulfur, and particulate matter, and the ISA chapter in the Draft IRP to support the primary and secondary NAAQS for particulate matter. These and other HHRA products are needed by individuals, communities, and governmental agencies to improve risk analyses, better inform regulatory decisions, and protect human health and the environment.

***Additional Information:*** A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

**(PM RA2) Percentage of planned research outputs delivered to clients and partners for use in informing human health decisions.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 38 | 100 | 67 | 60 | 67 | 100 | |

| Performance Measures and Data |
|---|
| ***Explanation of Results:*** In FY 2017, ORD's HHRA Research Program completed 100% (2 of 2) of its research outputs as planned. The outputs included release of two final IRIS assessments, IRIS Evaluation of the Inhalation Carcinogenicity of Ethylene Oxide and the IRIS Assessment of Benzo[a]pyrene. These IRIS assessments support policy and regulatory decisions for EPA's programs and regions, and state and other federal agencies by providing hazard identification and dose-response assessments. HHRA also completed 12 Provisional Peer-Reviewed Toxicity Value (PPRTV) assessments, which are used by EPA's Superfund program and regional decision-makers to characterize the contamination of a Superfund site and when making site-specific clean-up decisions, such as when to pursue monitoring and remediation for a contaminant of concern.<br><br>***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility. |

**(PM RA6) Number of regulatory decisions in which decision-makers used HHRA peer-reviewed assessments (IRIS, PPRTVs, exposure assessments and other assessments)**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | | 20 | 20 | 20 | 20 | 20 | Number |
| **Actual** | | 140 | 100 | 100 | 100 | 120 | |

***Explanation of Results:*** In FY 2017, ORD's HHRA Research Program significantly exceeded its goal for this measure by continuing its efforts to develop efficient, high quality, and translatable assessments that are useful and relevant to program managers. HHRA peer-reviewed assessments are used by EPA program and regional offices to inform critical decisions to protect human health. For example, PPRTV assessments are used by EPA's Superfund program and regional decision makers to characterize the contamination of a Superfund site and when making site-specific cleanup decisions. These assessments advance science and technology to help improve the health and quality of life in communities affected by hazardous waste sites and improve industry environmental practices.

***Additional Information:*** The measure calculates the number of Agency regulatory decisions for which clients use HHRA peer-reviewed health assessments. The measure is calculated by reviewing regulatory decisions and Records of Decision (ROD) made by EPA, determining how many quantitative health assessment values were used in these EPA program decisions, and what percentage of these values had been developed by the HHRA Program. This measure was piloted in FY 2013 and FY 2014 and was based on available information for FY 2010 that is unlikely to be reproducible and has since been calculated using data collected from the Superfund Enterprise Management System and EPA regulatory docket information collected from Regulations.gov.

**(PM RA7) Annual milestone progress score for completing draft IRIS health assessments.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 50 | 50 | 40 | 40 | 40 | 40 | Score |
| **Actual** | 8 | 17 | 30 | 7 | 4 | 11 | |

## Performance Measures and Data

***Explanation of Results:*** In FY 2017, ORD's HHRA Research Program achieved a score of 11 for draft IRIS assessments. Though the target was not met, key assessment products completed for HHRA include three IRIS Assessment Plans (nitrate/nitrite, chloroform, and ethylbenzene) and two external review drafts for IRIS assessments (ethyl tert-butyl ether, tert-butanol). In FY 2017, the IRIS pipeline was placed on hold while new EPA and ORD leadership was being appointed. In addition to this, the implementation of NAS and Government Accountability Office (GAO) recommendations, notably development and application of systematic review methodologies, introduced competing priorities that contributed to the challenges in meeting this goal. The scoring method used for this measure was developed many years ago and does not reflect significant IRIS programmatic changes that began in 2011. IRIS assessments evaluate potential health effects that may result from exposure to environmental contaminants, such as chemicals in drinking water, pollutants in air, and contaminants in soil.

***Additional Information:*** At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. Points are scored by multiplying the weight of each assessment by the number of milestones completed in the assessment process. The program targets represent a steady and timely completion of draft assessments throughout each fiscal year. Near-term targets are based on the large volume of ongoing assessments that have not been released in draft due to the change in the process for external review. In 2011, the National Research Council (NRC) made several recommendations to EPA for improving the development of IRIS assessments, which EPA has made progress on that has subsequently been recognized by NRC. To increase its transparency, accessibility, and efficiency, EPA is using a new document structure for draft assessments, including an Executive Summary presenting major conclusions, a description of methods used to develop the assessment, distinct sections on Hazard Identification and Dose-Response Analysis, and more tables and figures to clearly present data. To better support policy and regulatory decisions for EPA's programs and regions, as well as state agencies, IRIS is reconfirming their priority chemicals and product needs, and aligning those with appropriate allocation of resources. In addition to Superfund, water, air, and children's health drivers, IRIS has sharpened its focus on the new Toxic Substances Control Act (TSCA) law, and has been providing the needed scientific support to meet its expedited timelines.

**(PM RA8) Annual progress score for finalizing IRIS health assessments.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 20 | 20 | 15 | 15 | 15 | 15 | Score |
| **Actual** | 17 | 8 | 0 | 5 | 5 | 4 | |

## Performance Measures and Data

***Explanation of Results:*** In FY 2017, ORD's HHRA Research Program achieved a score of 4 for final IRIS assessments. In FY 2017, the IRIS pipeline was placed on hold while new EPA and ORD leadership was being appointed. In addition to this, the implementation of NAS and GAO recommendations, notably development and application of systematic review methodologies, introduced competing priorities that contributed to the challenges in meeting this goal. Though the target was not met, key assessments for ethylene oxide and benzo[a]pyrene were both posted as final. Now final, these IRIS assessments that identify potential health hazards and evaluate dose-response resulting from exposure to ethylene oxide or benzo[a]pyrene in drinking water, air, and soil will be used by EPA's program and regional offices to inform decisions under an array of environmental laws (e.g., Clean Air Act; Safe Drinking Water Act; Comprehensive Environmental Response, Compensation, and Liability Act).

***Additional Information:*** This measure tracks the program's ability to make progress in finalizing and releasing IRIS assessments. The annual score, tracked cumulatively throughout the year, is based on the relative weighting of each chemical. Chemicals are weighted using a 3-tier system that includes client interest, complexity of science, and level of effort required. Points are scored by multiplying the weight of each assessment by the number of milestones completed in the assessment process. The program targets represent a steady and timely completion of final assessments throughout each fiscal year. Near-term targets are based on the large volume of ongoing assessments that have not been finalized due to the change in the process for external review and completion. This measure will be assessed as rolling average. In 2011, the NRC made several recommendations to EPA for improving the development of IRIS assessments. EPA has made progress in implementing these recommendations; accordingly, the NRC 2014 report commended EPA's efforts to modernize IRIS. To increase its transparency, accessibility, and efficiency, EPA is using a new document structure for draft assessments, including an Executive Summary presenting major conclusions, a description of methods used to develop the assessment, distinct sections on Hazard Identification and Dose-Response Analysis, and more tables and figures to clearly present data. To better support policy and regulatory decisions for EPA's programs and regions, as well as state agencies, IRIS is reconfirming their priority chemicals and product needs, and aligning those with appropriate allocation of resources. In addition to Superfund, water, air, and children's health drivers, IRIS has sharpened its focus on the new TSCA law, and has been providing the needed scientific support to meet its expedited timelines.

**(PM SW1) Percentage of planned research products completed on time by the Safe and Sustainable Water Resources research program.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 86 | 70 | 90 | 100 | 100 | 100 | |

***Explanation of Results:*** In FY 2017, ORD's Safe and Sustainable Water Resources (SSWR) research program completed 100% (7 of 7) of its planned high priority products. Among these products was a years-long collaboration with the Office of Water to explore the use of a Multi-Metric Marine Biotic Index (M-AMBI) that has been tested for nationwide use for coastal benthic zone assessments. The use of a single, standard index will allow for more consistent assessments and comparisons of coastal zones. ORD also optimized Harmful Algal Bloom mitigation strategies by initiating a series of bench-scale engineering trials and full-scale sampling campaigns. These products, as other SSWR products, provide the data and tools needed by individuals, communities, and governmental agencies to promote water conservation, safeguard our water resources from ongoing threats, and protect public health.

***Additional Information:*** A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products are needed to be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

| Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| **(PM SW2) Percentage of planned research outputs delivered to clients and partners to improve the Agency's capability to ensure clean and adequate supplies of water that support human well-being and resilient aquatic ecosystems.** | | | | | | | |
| | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| **Target** | 100 | 100 | 100 | 100 | 100 | 100 | Percent |
| **Actual** | 50 | 100 | 100 | 100 | 100 | 100 | |

***Explanation of Results:*** In FY 2017, ORD's SSWR research program completed 100% (1 of 1) of its planned outputs. This output was a synthesis of the science on groundwater quality impacts around uranium in-situ recovery sites. This synthesis report will provide decision makers with key information on protecting groundwater while developing energy and mineral resources. This synthesis work, as well as other SSWR research, provides the science and innovative technologies that the Agency and the nation need to maintain drinking water resources and systems, as well as to protect the chemical, physical and biological integrity of the nation's waters.

***Additional Information:*** Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility.

## Enabling Support Programs Performance Array

## OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT

| | Performance Measures and Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **(PM 009) No reduction in percentage of certified acquisition staff (1102).** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 335 / 80 | 323 / 80 | 85 | 85 | 85 | 85 | Number/ Percent |
| | **Actual** | 323/85 | 285 / 85 | 93 | 95 | 93 | 95 | |
| | ***Explanation of Results:*** As of October 1, 2017, there were 265 acquisition (1102) staff on board, of which 251 (95%) were certified. Certification ensures that acquisition staff are properly trained and qualified. | | | | | | | |
| | **(PM 010) Reduction in Greenhouse Gas (GHG) Scopes 1 & 2 emissions below 2008 baseline.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 6.4 | 12.2 | 16.3 | 16.3 | 20.1 | 23.0 | Percent |
| | **Actual** | 54.1 | 57.4 | 59.5 | 63 | 60.2 | Data Avail 2018 | |
| | ***Additional Information:*** See EPA's FY 2016 Strategic Sustainability Performance Plan page 4 at https://www.epa.gov/sites/production/files/2016-09/documents/epa_2016_strategic_sustainability_performance_plan.pdf. | | | | | | | |
| | **(PM 098) Reduction in energy consumption below 2003 baseline.** | | | | | | | |
| | | **FY 2012** | **FY 2013** | **FY 2014** | **FY 2015** | **FY 2016** | **FY 2017** | **Unit** |
| | **Target** | 21 | 24 | 27 | 27 | 32.5 | 35 | Percent |
| | **Actual** | 23.7 | 25.6 | 28.9 | 32.7 | 34.6 | Data Avail 2018 | |
| | ***Additional Information:*** See EPA's FY 2016 Strategic Sustainability Performance Plan page 4 at https://www.epa.gov/sites/production/files/2016-09/documents/epa_2016_strategic_sustainability_performance_plan.pdf. | | | | | | | |

## OFFICE OF ENVIRONMENTAL INFORMATION

| | Performance Measures and Data |
|---|---|

**(PM 052) Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 67 | 75 | 80 | 77 | 80 | 90 | Systems |
| **Actual** | 68 | 73 | 89 | 107 | 125 | 174 | |

***Explanation of Results:*** The 39% spike in flows is indicative of EPA's shift towards cooperative federalism. The Office of Enforcement and Compliance (OECA) rolled out its Network Discharge Monitoring Report System (NETDMR) to Regions, States and Tribes, creating 38 unique CDX flows.

***Additional Information:*** The Central Data Exchange (CDX) program began in FY 2001 to enable states, tribes and others to send environmental data to EPA through a centralized electronic process. The CDX program estimates its results as the net of new systems using CDX services (increase) and retirement of older systems that are being phased out (decrease). As a result, these results may increase or decrease in subsequent years. The unit of measure "system" is defined as the number of data flows/exchanges that occur through CDX by EPA program offices, states and tribes. There are 16 Vehicle Engine Regulation (VERIFY) data flows/exchanges that occur in CDX. Each serves a different need and is counted individually. Because CDX is used for these 16 unique needs, separate systems have not been developed to fulfill this need; rather, the one CDX solution serves them all.

**(PM 053) States, tribes and territories will be able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 80 | 95 | 98 | 103 | 140 | 140 | Users |
| **Actual** | 92 | 97 | 102 | 104 | 140 | 157 | |

***Additional Information:*** Users are defined for this measure as the total number of physical and virtual nodes in production and test.

**(PM 999) Total number of active unique users from states, tribes, laboratories, regulated facilities and other entities that electronically report environmental data to EPA through CDX.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 58,000 | 70,000 | 75,000 | 84,000 | 90,000 | 100,000 | Users |
| **Actual** | 65,238 | 79,818 | 96,000 | 85,894 | 116,636 | 116,837 | |

***Additional Information:*** To calculate unique users of the CDX system, CDX takes all users whose accounts have been active in the last two years and eliminates duplicate registrations under the same email address. Because many EPA regulations require periodic reporting, i.e., once every two, three or five years, a two-year span was utilized to capture the majority of users without overstating their "active" status.

## OFFICE OF THE INSPECTOR GENERAL

| | Performance Measures and Data |
|---|---|

**(PM 35A) Environmental and business actions taken for improved performance or risk reduction.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 334 | 307 | 248 | 268 | 274 | 274 | Actions |
| **Actual** | 216 | 215 | 324 | 296 | 285 | 204 | |

***Explanation of Results:*** Due to the manner in which audits are planned, a significant number of the reports issued by the Office of the Inspector General (OIG) in FY 2017 were issued within the last three months of the Fiscal Year. As a result, the Agency did not have sufficient time to initiate or complete corrective actions related to OIG recommendations.

***Additional Information:*** This measure captures implemented corrective actions taken by the Agency based on OIG recommendations to improve EPA programs and/or processes. Results are typically from prior years and may fluctuate depending on the Agency's ability to complete agreed-upon corrective actions. The target for this measure is developed by taking the actual performance for two or three fiscal years and adjusted to reflect any significant changes in priorities.

**(PM 35B) Environmental and business recommendations or risks identified for corrective action.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 903 | 786 | 687 | 967 | 1,094 | 1,094 | Recommendations |
| **Actual** | 1,242 | 1,003 | 944 | 1,110 | 1,127 | 1150 | |

***Additional Information:*** This measure captures the number of OIG outputs (recommendations for improvement, outreach activities to plan and promote OIG work, congressional testimonies delivered, best practices identified, and risks identified). One key activity during an OIG audit/evaluation is identifying risks to EPA operations and programs. Risk identification is based on federal standards for internal control. Internal control is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable reporting, and compliance with laws, regulations and policies. Ultimately effective internal controls assure that operations run efficiently and effectively. The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities.

**(PM 35C) Return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations.**

| | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Unit |
|---|---|---|---|---|---|---|---|
| **Target** | 110 | 125 | 132 | 220 | 220 | 220 | Percent |
| **Actual** | 743 | 248 | 734 | 1,656 | 2,098 | 722 | |

<table>
<tr><th></th><th>Performance Measures and Data</th></tr>
<tr><td></td><td>Additional Information: Results under this measure identify the potential return on investment and do not include actual recoveries. The OIG's role is to question costs and identify cost efficiencies and funds put to better use (recommended efficiencies). The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities. In FY 2012 and FY 2014 the OIG issued a single report with usually high recommended efficiencies (FY 2012-$372M; FY 2014-$230M). These were excluded from the average calculations given that reports with massive ROI do not materialize every year.</td></tr>
<tr><td></td><td>(PM 35D) Criminal, civil, administrative, and fraud prevention actions.
<table>
<tr><th></th><th>FY 2012</th><th>FY 2013</th><th>FY 2014</th><th>FY 2015</th><th>FY 2016</th><th>FY 2017</th><th>Unit</th></tr>
<tr><td>Target</td><td>85</td><td>90</td><td>125</td><td>175</td><td>145</td><td>145</td><td rowspan="2">Actions</td></tr>
<tr><td>Actual</td><td>152</td><td>256</td><td>213</td><td>304</td><td>181</td><td>298</td></tr>
</table>
Additional Information: This measure captures criminal, civil, and administrative actions as a result of OIG investigations on fraud, waste and abuse. To a large extent, results are influenced by factors outside the control of OIG (judges, juries, etc.).</td></tr>
</table>

## Cross-Agency Strategies

The table below summarizes progress that the Environmental Protection Agency has achieved under the cross-agency strategies (CAS) established in the *FY 2014-2018 EPA Strategic Plan.*

| |
|---|
| **Working to Make a Visible Difference in Communities –** Align community-based activities to provide seamless assistance to communities, both urban and rural, while maximizing efficiency and results. Expand support of community efforts to build healthy, sustainable, green neighborhoods and reduce and prevent harmful exposures and health risks to children and underserved, overburdened communities. |
| EPA has held seventeen webinars to date highlighting EPA University and other outreach activities that support community-based work. Five of those webinars took place in FY 2017 and highlighted various topics (e.g., equitable development, resilient design, community-university partnerships, public health). One in-person full day training on equitable development was conducted for EPA staff. The Communities CAS also developed and piloted a Resource Request Platform that is now ready to be used in FY 2018to enable regions and program offices to match available resources from National Program Managers in support of high-need communities identified by the regional offices. This Platform is more user-friendly than the interim resource matching process EPA used in FY 2017 and improves cross-agency coordination, maximizing the impact of government resources. |
| **Launching a New Era of State, Tribal, Local, and International Partnerships** – Strengthen partnerships with states, tribes, local governments, and the global community that are central to the success of the national environmental protection program through consultation, collaboration, and shared accountability. Modernize the EPA–state relationship, including revitalizing the National Environmental Performance Partnership System and jointly pursuing E-Enterprise, a transformative approach to make environmental information and data more accessible, efficient, and evidence-based through advances in monitoring, reporting, and information technology. |
| As of FY 2017, EPA has finalized 319 EPA-Tribal Environmental Plans (ETEPs) – jointly developed documents outlining how the EPA and the tribe will work together to implement programs on tribal lands – with more than 100 additional ETEPs in progress. Over the past four years, EPA and tribes have maintained steady focus on ETEP development. EPA also completed the development of a model lead paint law in collaboration with United Nations Environment Program as well as key industry, government and NGO stakeholders. The Partnerships Cross-Agency Strategy augmented Agency efforts to implement E.O. 13777, "Enforcing the Regulatory Agenda," by briefing representatives of seventeen national intergovernmental associations, eight governors' offices, several state attorneys general, state regulatory agencies, county officials and mayors, all to inform the efforts of EPA's Regulatory Reform Task Force as it identifies regulation and policy candidates for revision, repeal or replacement. The Partnerships CAS also worked with state, local, and tribal partners through the support of E-Enterprise and developed a Shared Services strategy in September 2017 which is currently being implemented to integrate shared information technology services. |

**Environmental Protection Agency**
**2019 Annual Performance Plan and Congressional Justification**

**Table of Contents – Appendix**

## Coordination with Other Federal Agencies

## Environmental Programs

### Air and Radiation Programs

*National Ambient Air Quality Standards (NAAQS) Implementation*

EPA cooperates with other federal, state, tribal and local agencies to achieve goals related to ground level ozone and particulate matter (PM), and to ensure the actions of other agencies are compatible with state plans for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). EPA works closely with the Department of Agriculture (USDA), the Department of the Interior (DOI), and the Department of Defense (DOD) on issues such as prescribed burning at silviculture and agricultural operations. EPA, the Department of Transportation (DOT) and the Army Corps of Engineers (ACE) also work with state and local agencies to integrate transportation and air quality plans, reduce traffic congestion, and promote livable communities.

To improve EPA's understanding of environmental issues related to the agricultural sector, EPA has worked closely with the USDA and others to improve air quality while supporting a sustainable agricultural sector.

*Regional Haze*

EPA works with the DOI, National Park Service (NPS), and U.S. Forest Service (USFS) in implementing its regional haze program and operating the Interagency Monitoring of Protected Visual Environments (IMPROVE) visibility monitoring network. The operation and analysis of data produced by this air monitoring system is an example of the close coordination of efforts between EPA and state and tribal governments. EPA also consults with the DOI's Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) on potential endangered species issues.

*Air Quality Assessment, Modeling, and Forecasting*

For pollution assessments and transport, EPA works with the National Aeronautics and Space Administration (NASA) on technology transfer using satellite imagery. EPA further distributes NASA satellite products and NOAA air quality forecast products to states, local agencies and tribes to provide a better understanding of daily air quality and to assist with air quality forecasting. EPA works with NASA to develop a better understanding of PM formation using satellite data. EPA also has worked with the Department of the Army on advancing emission measurement technology and with NOAA for meteorological support for our modeling and monitoring efforts. EPA collects real-time ozone and PM measurements from state and local agencies, which are used by both NOAA and EPA to improve and verify Air Quality Forecast models.

EPA's *AIRNow* program (the national real-time Air Quality Index reporting and forecasting system) works with the National Weather Service (NWS) to coordinate NOAA air quality forecast

guidance with state and local agencies for air quality forecasting efforts and to render the NOAA model output in EPA Air Quality Index (AQI), which helps people determine appropriate air quality protective behaviors. In wildfire situations, EPA and the USFS work closely with states to deploy monitors and report monitoring information and other conditions on *AIRNow*. EPA also has worked with USFS by providing new science on the impacts of smoke on health to inform smoke management practices and intervention strategies to reduce health impacts. The *AIRNow* program also has collaborated with the NPS and the USFS in collecting air quality monitoring observations, in addition to observations from over 130 state, local and tribal air agencies. *AIRNow* also collaborates with NASA in a project to incorporate satellite data with air quality observations.

EPA, the USDA, and the DOI established a collaborative framework to address issues pertaining to wildland fire and air quality. The agreement recognizes the key roles of each agency, as well as opportunities for collaboration. For example, the partnership explains that the agencies seek to reduce the impact of emissions from wildfires, especially catastrophic wildfires, and the impact of those emissions on air quality. In addition, the partnership highlights opportunities for enhancing coordination among the agencies through information sharing and consultation, collaboration on tools and information resources, and working together to collaborate with state and other partners, among other goals.

*Mobile Sources*

EPA works with the DOT's National Highway Traffic Safety Administration (NHTSA) on the coordinated national program establishing standards to improve fuel efficiency and reduce GHG emissions for light-duty vehicles. Specifically, EPA, in coordination with the DOT's fuel economy and fuel consumption standards programs, implements vehicle and commercial truck greenhouse gas standards with a focus on industry compliance to ensure the standards are realized.

To address criteria pollutant emissions (such as nitrogen oxide [$NO_x$] and PM) from marine and aircraft sources, EPA works collaboratively with the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO), as well as with other federal agencies, such as the U.S. Coast Guard (USCG) and the Federal Aviation Administration (FAA). EPA also collaborates with the USCG in the implementation of Emission Control Area (ECA) around the United States, and with Mexico and Canada in the North American Commission for Environmental Cooperation (CEC) to evaluate the benefits of establishing a Mexican ECA.

To better understand the sources and causes of mobile source pollution, EPA works with the DOE and DOT to fund applied research projects including transportation modeling projects. EPA also has worked closely with the DOE on refinery cost modeling analyses to support clean fuel programs. EPA also coordinates with the DOE's Energy Information Administration (EIA) regarding fuel supply during emergency situations. For mobile sources program outreach, the Agency has participated in a collaborative effort with DOT's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) to educate the public about the impacts of transportation choices on traffic congestion, air quality, and human health. This community-based public education initiative also includes the Centers for Disease Control and Prevention (CDC). EPA also has worked with FHWA to develop and deliver training on modeling emissions from cars and trucks and with other federal agencies, such as the USCG, on air emission issues. Other programs targeted to reduce air toxics from mobile sources are coordinated with the DOT. These

partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country. EPA has worked with the DOE, DOT and other agencies, as needed, on the requirements of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007, such as the Renewable Fuel Standard. EPA also has worked with other agencies on biofuel topics through the Biomass Research and Development Institute.

To develop air pollutant emission factors and emission estimation algorithms for aircraft, ground equipment, and military vehicles, EPA partners with the DOD. This partnership provides for the joint undertaking of air-monitoring/emission factor research and regulatory implementation.

*Air Toxics*

EPA works closely with other health agencies such as the CDC, the National Institute of Environmental Health Sciences (NIEHS), and the National Institute for Occupational Safety and Health (NIOSH) on health risk characterization for both toxic and criteria air pollutants. EPA also contributes air quality data to the CDC's Environmental Public Health Tracking Program, which is made publicly available and used by state and local public health agencies.

*Addressing Transboundary Air Pollution*

In developing regional and international air quality programs and projects, and in working on regional agreements, EPA has worked with the Department of State (DOS), NOAA, NASA, DOE, USDA, U.S. Agency for International Development (USAID), and the Office of Management and Budget (OMB), as well as with regional organizations. In addition, EPA has partnered with other organizations and countries worldwide, including the United Nations Environment Programme (UNEP), the European Union (EU), the Organization for Economic Cooperation and Development (OECD), the United Nations Economic Commission for Europe (UNECE), the CEC, Canada, Mexico, China, and Japan.

EPA partners with environment and public health officials and provides technical assistance through UNEP to facilitate the development of air quality management strategies to other major emitters and/or to key regional or sub-regional groupings of countries.

*Stratospheric Ozone*

EPA works closely with the DOS and other federal agencies in international negotiations among Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer and in developing the implementing regulations. The environmental goal of the Montreal Protocol is to protect the ozone layer and, the ozone depleting substances (ODS) it controls also are significant greenhouse gases. EPA has worked on several multinational environmental agreements working closely with the DOS and other federal agencies, including the OMB, Office of Science Technology and Policy (OSTP), Council on Environmental Quality (CEQ), USDA, Food and Drug Administration (FDA), Department of Commerce, NOAA and NASA.

EPA works with other agencies, including the Office of the United States Trade Representative (USTR) and the Department of Commerce (DOC), to analyze potential trade implications in

stratospheric protection regulations that affect imports and exports. EPA has coordinated efforts with the Department of Justice (DOJ), Department of Homeland Security (DHS), Department of Treasury (U.S. Treasury) and other agencies to curb the illegal importation of ODS.

EPA has had discussions with the DOD, U.S. General Services Administration (GSA), and NASA to assist in the effective transition from ODS.

EPA has worked with USDA and the DOS to facilitate research, development and adoption of alternatives to methyl bromide. EPA also has consulted with USDA on domestic methyl bromide needs.

EPA has coordinated with NASA and NOAA to monitor the state of the stratospheric ozone layer and to collect, analyze, and disseminate Ultraviolet (UV) data.

EPA has coordinated with the Small Business Administration (SBA) to ensure that proposed rules are developed in accordance with the Small Business Regulatory Flexibility Act (SBREFA).

*Radiation and Radiation Preparedness and Response*

EPA works primarily with the Nuclear Regulatory Commission (NRC), DOE, and the DHS on multiple radiation-related issues. EPA has ongoing planning and guidance discussions with DHS on general emergency response activities, including exercises responding to nuclear related incidents. As the regulator of DOE's Waste Isolation Pilot Plant (WIPP) facility, EPA is charged with coordinating oversight activities with DOE to ensure the facility is operating in compliance with EPA regulations. EPA is a member of the Interagency Radiation Source Protection and Security Task Force, established in the Energy Policy Act, to improve the security of domestic radioactive sources. EPA also is a working member of the interagency Nuclear Government Coordinating Council (NGCC), which coordinates across government and the private sector on issues related to security, communications and emergency management within the nuclear sector.

For emergency preparedness purposes, EPA coordinates closely with other federal agencies through the Federal Radiological Preparedness Coordinating Committee and the Advisory Team for Environment, Food and Health which provides federal scientific advice and recommendations to state and local decision makers such as governors and mayors during a radiological emergency. EPA has participated in planning and implementing table-top and field exercises including radiological anti-terrorism activities, with the NRC, DOE, DOD, Department of Health and Human Services (DHHS) and DHS.

EPA is a charter member and co-chairs the Interagency Steering Committee on Radiation Standards (ISCORS) which was created at the direction of Congress. Through quarterly meetings and the activities of its six subcommittees, member agencies are kept informed of cross-cutting issues related to radiation protection, radioactive waste management, and emergency preparedness and response. ISCORS also helps coordinate U.S. responses to radiation-related issues internationally.

During radiological emergencies EPA would work with expert members of the International Atomic Energy Agency's (IAEA). Additionally, EPA would work with OECD's Nuclear Energy Agency (NEA) on two committees: the NEA Radioactive Waste Management Committee (RWMC) and the Committee on Radiation Protection and Public Health (CRPPH) as necessary during the response and remediation including those incidents involving significant waste issues. Through participation on the CRPPH and its working groups, EPA has been successful in bringing a U.S. perspective to international radiation protection policy, and benefits from having other countries' perspectives.

*Research*

EPA has continued to strengthen interactions with other agencies, including NOAA, DOE, USDA, NIH and FHWA to improve understanding and develop sustainable approaches to manage risks from air pollution. For example, EPA has worked with NOAA and NASA to relate satellite-based air quality data to ambient monitoring.

## Water Programs

*Collaboration with Public and Private Partners on Water Infrastructure Preparedness, Response and Recovery*

EPA has coordinated with other federal agencies, primarily the DHS, CDC, FDA and DOD, on biological, chemical, and radiological contaminants of high concern, and how to detect and respond to their presence in drinking water and wastewater systems. A close linkage with the Federal Bureau of Investigation and the Intelligence Analysis Directorate in DHS, particularly with respect to ensuring the timely dissemination of threat information through existing communication networks, will be continued. The Agency is strengthening its working relationships with the Water Research Foundation, the Water Environment Research Foundation, and other research institutions to increase our knowledge on technologies to detect contaminants, monitoring protocols and techniques, and treatment effectiveness.

EPA has worked with the ACE and the Federal Emergency Management Agency (FEMA) to refine coordination processes among federal partners engaged in providing emergency response support to the water sector. These efforts will include refining existing standard operating procedures, participating in cross-agency training opportunities, and planning multi-stakeholder water sector emergency response exercises. EPA will be determining how ACE, FEMA and the Agency are to clarify their roles and responsibilities under the National Disaster Recovery Framework. In addition, EPA has continued to work with FEMA and ACE, as well as other agencies, on the Federal Interagency Floodplain Management Task Force with regard to water resources and floodplain management.

Executive Order 13636 on *Improving Critical Infrastructure Cybersecurity* directs EPA to coordinate with DHS and the Department of Commerce in developing implementation guidance on cybersecurity practices for water systems. EPA intends to harness the extensive cybersecurity capabilities of DHS in carrying out its responsibilities under this mandate.

*Geologic Sequestration*

EPA has coordinated with federal agencies to ensure safe and effective implementation of regulations to protect underground sources of drinking water during geologic sequestration activities, as well as plan and obtain research-related data and coordinate regulatory activities. Specifically, EPA has coordinated with the DOE, the USGS, and Internal Revenue Service (IRS) to ensure that Safe Drinking Water Act regulations for geologic sequestration sites are appropriately coordinated with efforts to deploy projects, map geologic sequestration capacity, provide tax incentives for $CO_2$ sequestration, and manage the movement of $CO_2$ from capture facilities to geologic sequestration sites.

*Drinking Water Programs*

EPA and the U.S. Geological Survey (USGS) have established an Interagency Agreement to coordinate activities and information exchange in the areas of unregulated contaminants occurrence, the environmental relationships affecting contaminant occurrence, protection area delineation methodology, and analytical methods. This collaborative effort has improved the quality of information to support risk management decision-making at all levels of government, generated valuable new data, and eliminated potential redundancies.

EPA and the Food and Drug Administration (FDA) are updating a Memorandum of Understanding (MOU) first established in 1978 to coordinate the authorities and programs of the two agencies with respect to oversight of drinking water on interstate conveyance carriers (e.g., aircraft, trains). The updates to the MOU are in response to EPA's Aircraft Drinking Water Rule (ADWR) promulgated on October 19, 2009. Coordination will include sharing information on sample results indicating microbial contamination, inspections and enforcement actions; working together when water quality events occur that could impact the quality of water boarded onto aircraft, and other activities to ensure that a safe and reliable supply of drinking water is provided to passengers and crew. In addition, EPA scientists are collaborating with FDA scientists to evaluate the health effects of perchlorate exposure. Along with the aforementioned activities, EPA and the CDC also meet quarterly to discuss cross-cutting issues related to drinking water contaminants and potential public health concerns.

EPA's Office of Ground Water and Drinking Water also has collaborated with Housing and Urban Development (HUD) to develop strategies to decrease drinking water lead exposure in homes. The partnership shares information, leverages funding and reviews processes to facilitate better-informed decisions and coordinate investments.

*Sustainable Rural Drinking and Wastewater Systems*

EPA and USDA work together to increase the sustainability of rural drinking water and wastewater systems to ensure the protection of public health, water quality, and sustainable communities. The two agencies have worked to facilitate coordinated funding for infrastructure projects that aid in the compliance of national drinking water and clean water regulations. EPA will continue to collaborate with the USDA to provide assistance to small rural drinking water systems that struggle

to comply with drinking water regulations and/or lack an adequate governance structure to keep the system operating sustainably.

*National Water Sector Workforce Development: Department of Veterans Affairs*

EPA and the Department of Veterans Affairs (VA) Vocational Rehabilitation and Employment (VR&E) Service jointly promoted activities that will help advance and improve employment opportunities for Veterans with disabilities while supporting the development of a trained and competent workforce for the Water Sector. Key objectives of this collaborative effort are to: (1) educate those involved with transitioning veterans to civilian careers about the water and wastewater industries; (2) promote Water Sector career opportunities to veterans; (3) educate utilities about Veterans Affairs programs and connect them with veterans, and (4) promote state program collaboration (particularly operator certification programs) with local VA counselors.

*Tribal Access Coordination*

EPA, and the USDA, HUD, DHHS, Indian Health Service (IHS), and DOI have worked together to maintain and improve coordination in delivering water and wastewater infrastructure services and financial assistance to American Indian communities. The agencies work together to increase the number of American Indian homes provided access to safe drinking water.

*Source Water Protection and Harmful Algal Blooms*

EPA has coordinated with other federal agencies, including with the USDA (Natural Resource Conservation Service [NRCS] and USFS) and the USGS, to support federal, state and local implementation of source water protection actions. In addition, EPA has coordinated with the Homeland Security Infrastructure Program (HSIP) of the National Geospatial-Intelligence Agency (NGA) to integrate their data on national and defense-critical infrastructure into source water protection analyses such as identifying potential contributors to harmful algal blooms (HABs) and chemical spill response. To further combat harmful algal blooms, the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 (HABHRCA 2014, P.L. 113-124) emphasizes the mandate to advance the scientific understanding and ability to detect, predict, control, mitigate, and respond to harmful algal blooms and hypoxia. This legislation established the Interagency Working Group on HABHRCA (IWG-HABHRCA). It tasked the group with coordinating and convening Federal agencies to discuss HAB and hypoxia events in the United States, and to develop action plans, reports, and assessments of these situations. The Working Group is co-chaired by EPA and NOAA and also includes the: FDA, National Institute of Food and Agriculture, CDC, ACE, Bureau of Ocean Energy Management, U.S. Navy, National Science Foundation (NSF), USGS and NIEHS.

*Data Availability, Outreach, and Technical Assistance*

EPA has coordinated with USGS, USDA (including the USFS, NRCS, Cooperative State Research, Education, and Extension Service, Rural Utilities Service), CDC, DOT, DOD, DOE, DOI (including the NPS and Bureaus of Indian Affairs [BIA], Land Management, and Reclamation), IHS, and the Tennessee Valley Authority to make federal environmental data more available to states and the public. In addition, EPA has collaborated with the other federal agencies,

states and industry associations to establish a National Ground Water Monitoring Network with states to provide a fuller set of ground water data nationally through a single portal. Data helps to address national and regional issues related to water use, adaptation, and food and energy production.

*Water Technology and Innovation*

Many departments within the Federal family have led or supported work to catalyze the role of Technology and Innovation in work for Clean and Safe Water.

A sample of EPA collaborations include:

- DOS to advise on efficient and innovative water infrastructure design at U.S. Embassies;
- DOE in researching opportunities to address the Food-Water-Energy Nexus, as well as research focused on optimally targeting resources to water/wastewater utilities with the greatest needs;
- Bureau of Reclamation to support Technology Challenges in order to catalyze the development of low-cost, high-performance water sensors;
- NOAA in the development of the National Water Data Center;
- The interagency National Drought Resilience Partnership, to fast-track solutions to long-term drought;
- NSF (and DOE, as well as non-federal entities) in the development of the National Testbed Network ("FAST Network"), to test water technologies and provide crucial information to local decision-makers;
- FEMA to research innovative stormwater control approaches to mitigate urban flooding;
- NASA in assessing emerging water treatment technologies; and,
- Department of the Army in assessing emerging water service technologies.

*Watersheds*

Protecting and restoring watersheds will depend largely on the direct involvement of many federal agencies, including EPA, as well as state, tribal, and local governments who manage the multitude of programs necessary to address water quality on a watershed basis. Federal agency involvement will include the USDA (including the NRCS, USFS, and the Agriculture Research Service) with a special focus on the National Water Quality Initiative, DOI (including the Bureau of Land Management, Office of Surface Mining, USGS, FWS, and BIA), NOAA, DOT, DOD (including the U.S. Navy and ACE), and FEMA (integrating local hazard mitigation and water quality actions). At the state level, agencies involved in watershed management typically include departments of natural resources or the environment, public health agencies, and forestry and recreation agencies. Locally, numerous agencies are involved, including regional planning entities such as councils of governments, as well as local departments of environment, health, and recreation who frequently have strong interests in watershed projects.

*National Pollutant Discharge Elimination System (NPDES) Program*

Since inception of the NPDES program under Section 402 of the Clean Water Act (CWA), EPA and the authorized states have developed relationships with various federal agencies to implement pollution controls for point sources. EPA has worked with the FWS and NMFS on consultation for protection of endangered species. EPA has worked with the Advisory Council on Historic Preservation on National Historic Preservation Act implementation. EPA and the states rely on monitoring data from the USGS to help inform pollution control decisions. The Agency also has worked closely with the SBA and the OMB to ensure that regulatory programs are fair and reasonable. The Agency has coordinated with NOAA on efforts to ensure that NPDES programs support coastal and national estuary efforts and with the DOI on mining issues. The Agency also has coordinated with the FHWA to reduce the impacts of stormwater from roads.

*Clean Water State Revolving Fund*

EPA's State Revolving Fund program has worked with, as appropriate, the HUD and the USDA to foster collaboration on jointly funded infrastructure projects. In many states, coordination committees have been established with representatives from the three programs.

In implementation of the Indian set-aside grant program under Title VI of the CWA, EPA has worked closely with the Indian Health Service to administer grant funds to the various Indian tribes, including determination of the priority ranking system for the various wastewater needs in Indian Country. EPA and the USDA Office of Rural Development have partnered to provide coordinated financial and technical assistance to tribes.

*Federal Agency Partnerships on Impaired Waters Restoration Planning*

The federal government owns about 30 percent of the land in the United States and administers over 90 percent of these public lands through four agencies: the USFS, FWS, NPS, and Bureau of Land Management. In managing these extensive public lands, federal agencies have a substantial influence on the protection and restoration of many waters of the United States. Land management agencies' focus on water issues has increased significantly, with the USFS, FWS, and Bureau of Land Management (BLM) all initiating new water quality and watershed protection efforts. EPA has been conducting joint national assessments with these agencies to enhance watershed protection and quantify restoration needs on federal lands. EPA's joint national assessments of FWS and USFS properties already have documented the extent and type of impaired waters within and near these agencies' lands, developed geographic information system (GIS) databases, reported national summary statistics, and developed interactive reference products (on any scale, local to national), accessible to staff throughout the agencies. The USFS has worked with EPA on designating the third national update of the co-occurrence of impaired waters and National Forest lands. These assessments already have influenced the agencies in positive ways. The USFS and the FWS have performance measures that involve impaired waters. The USFS used their national assessment data to institute improvements in a national monitoring and Best Management Practices training program as well as develop a watershed condition framework for proactively implementing restoration on priority National Forest and Grassland watersheds. Also, under a Memorandum of Agreement between EPA and the USFS, numerous aquatic restoration projects

are being carried out. The Fish and Wildlife Service is using their national assessment data to inform agency planning on water conservation, quality, and quantity monitoring and management in the National Wildlife Refuge System, and also is using the assessment in National Fish Hatcheries System planning and their Contaminants Program. EPA assessments and datasets are making significant contributions to the government-wide National Fish Habitat Action Partnership national assessment of fish habitat condition and the restoration and protection efforts of 17 regional Fish Habitat Partnerships.

*Monitoring and Assessment of Nation's Waters*

EPA has worked with federal, state, and tribal partners to strengthen water monitoring programs to support a range of management needs and to develop tools to improve how we manage and share water data and report environmental results. EPA's Monitoring and Assessment Partnership is a forum for EPA, states, tribes and interstate organizations to collaborate on key program directions for assessing the condition of the nation's waters in a nationally consistent and representative manner. EPA is co-chair, along with the USGS, of the National Water Quality Monitoring Council, a national forum for scientific discussion of strategies and technologies to improve water quality monitoring and data sharing. The council membership includes other federal agencies, state and tribal agencies, non-governmental organizations, academic institutions, and the private sector.

Under an MOU, EPA and the USGS developed and are now operating the national Water Data Portal, a web portal serving data from the USGS and EPA ambient water quality data warehouses in a common format through the internet. EPA has an Interagency Agreement with the USGS for the development of NHDPlus version 2, which is complete for the lower 48 states. EPA also has collaborated with the USGS and NOAA, NPS, USDA, FWS, BLM, and the USFS on implementation, analysis and/or interpretation of the results of the National Aquatic Resource Surveys, an EPA, state and tribal partnership to assess and report on the condition of the nation's waters and changes over time using nationally consistent and regionally relevant methods.

*Wetlands*

EPA, and the FWS, ACE, NOAA, USGS, USDA's NRCS, USFS and FHWA have coordinated on a range of wetlands activities. These activities include: studying and reporting on wetlands trends in the United States, diagnosing causes of coastal wetland loss, statistically surveying the condition of the nation's wetlands, and developing methods for better protecting wetland function. Additionally, EPA and the ACE have worked very closely together in implementing the regulatory program under the CWA Section 404. Under the regulatory program, the agencies have coordinated closely on overall implementation of the permitting decisions made annually under Section 404 of the CWA. The agencies also have coordinated closely on policy development, training, development of technical tools for field use, litigation, and implementing the Executive Order on Infrastructure Permitting. EPA also works with the FWS and NOAA on regulatory matters involving permits. EPA and the ACE are committed to achieving the goal of no net loss of wetlands under the CWA Section 404 program.

*Natural Resources Damage Assessment and the Restore Council*

The 2010 *Deepwater Horizon* oil spill injured the Gulf of Mexico's natural resources. The EPA works in partnership with fellow federal and state trustees and their representatives to support the ongoing Natural Resources Damage Assessment and the Restore Council (Gulf Coast Ecosystem Restoration Council). Partners include NOAA, DOI and USDA.

*Research*

While EPA is the federal agency mandated to ensure safe drinking water, other federal and non-federal entities conduct research that complements EPA's research on priority contaminants in drinking water. For example, the CDC and NIEHS conduct health effects and exposure research. The FDA also performs research on children's risks.

Many of these research activities have been conducted in collaboration with EPA scientists. The private sector, particularly the water treatment industry, is conducting research in such areas as analytical methods, treatment technologies, and the development and maintenance of water resources. Cooperative research efforts have been ongoing with the American Water Works Association, Water Research Foundation, and other stakeholders to coordinate drinking water research. EPA has worked with the USGS to evaluate performance of newly developed methods for measuring microbes in potential drinking water sources.

EPA has developed joint research initiatives with the NOAA and USGS for linking monitoring data and field study information with available toxicity data and assessment models for developing sediment criteria.

*Homeland Security*

The HSRP also has consulted with the Water Sector and Government Coordinating Councils of Department of Homeland Security's Critical Infrastructure Partnership Advisory Council to understand the needs of the water sector and provide the latest research to the community. Other critical stakeholders, like the America Water Works Association and Association of State and Territorial Solid Waste Management Officials also can benefit from research. HSRP also has worked with state and local emergency response personnel and public health and environmental agencies to better understand their needs and build relationships, which can enable the quick deployment of research products.

## Land and Emergency Management Programs

*Brownfields*

EPA's Brownfields and Land Revitalization Programs have been key participants in the HUD-DOT-EPA Sustainable Communities Partnership to promote livability and sustainable development. The Brownfields program also has partnered with the Department of Labor and NIEHS to support environmental workforce development and fund job training and placement programs in brownfield communities. The Brownfields and Land Revitalization programs have

worked with the USDA, HHS, and the Agency for Toxic Substances and Disease Registry (ATSDR) to identify ways in which federal programs can increase food access in all communities and ensure access to quality health care. Improved access to healthy food and health care services can catalyze redevelopment that contributes to healthier and more sustainable communities. The Brownfields and Land Revitalization programs also have partnered with the NPS and its River and Trails Program to support Groundwork USA and individual Groundwork teams in their efforts to engage youth in community revitalization. EPA has led the Brownfields Federal Partnership, which includes more than 20 federal agencies dedicated to the cleanup and redevelopment of brownfields properties. Partner agencies have worked together to prevent, assess, safely clean up, and redevelop brownfields.

EPA has provided support to other federal agencies, such as USDA, for activities including jointly delivering technical assistance to rural Appalachian communities and proposing language that supports both economic development and better environmental outcomes in grant solicitations and other guidance documents. This assistance has helped these agencies and the communities they work with protect the environment and increase resilience through their community development programs, policies, regulations, and resources, while meeting their core agency objectives.

*Economically Distressed Communities*

EPA has brought expertise on the importance of downtown revitalization, the use of green infrastructure strategies, green demolition, and sustainable development strategies to the federal government to help economically distressed communities. EPA's work has positively impacted the work of the HUD, DOT, DOC, DHHS, DHS, DOJ, Small Business Administration (SBA), Department of Labor (DOL), and many other agencies and departments.

*Research*

Research in ecosystems protection has been coordinated government-wide through the Committee on Environment, Natural Resources, and Sustainability (CENRS). EPA has actively participated in the CENRS and all work is fully consistent with, and complementary to, other Committee member activities. EPA scientists have staffed two CENRS Subcommittees: the Subcommittee on Ecological Systems (SES) and the Subcommittee on Water Availability and Quality (SWAQ). EPA has initiated discussions within the SES on the subject of ecosystem goods and services (EGS) and potential EGS collaborations are being explored with the USGS and with the USFS. Within SWAQ, the Safe and Sustainable Water Resources (SSWR) research program has contributed to an initiative for a comprehensive census of water availability and quality, including the use of Environmental Monitoring and Assessment Program methods and ongoing surveys (National Aquatic Surveys) as data sources. In addition, EPA has taken a lead role with USGS in preparing a SWAQ document outlining new challenges for integrated management of water resources, including strategic needs for monitoring and modeling methods, and identifying water requirements needed to support the ecological integrity of aquatic ecosystems.

Consistent with the broad scope of EPA's ecosystem research efforts, EPA has had complementary and joint programs with the USFS, USGS, USDA, NOAA, BLM, non-government organizations (NGOs), and many others specifically to minimize duplication, maximize scope, and maintain a

real time information flow. For example, all of these organizations have worked together to produce the National Land Cover Data used by all landscape ecologists nationally. Each has contributed funding, services, and research to this uniquely successful effort.

EPA has expended substantial effort coordinating its research with other federal agencies, including work with DOD in its Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program, DOE, and its Office of Health and Environmental Research. EPA also has conducted collaborative laboratory research with DOD, DOE, DOI (particularly the USGS), and NASA to improve characterization and risk management options for dealing with subsurface contamination.

The agency has worked with NIEHS, which manages a large basic research program focusing on Superfund issues, to advance fundamental Superfund research. ATSDR also has provided critical health-based information to assist EPA in making effective cleanup decisions. EPA has worked with these agencies on collaborative projects, information exchange, and identification of research issues and has a MOU with each agency. EPA, and the ACE and U.S. Navy signed a MOU to increase collaboration and coordination in contaminated sediments research. Additionally, the Interstate Technology Regulatory Council (ITRC) has been an effective forum for coordinating federal and state activities and for defining continuing research needs through its teams on topics including permeable reactive barriers, radionuclides, and Brownfields. EPA has developed a MOU[1] with several other agencies (such as the DOE, DOD, NRC, USGS, NOAA, and USDA) for multi-media modeling research and development.

Other research efforts involving coordination include the unique controlled-spill field research facility designed in cooperation with the Bureau of Reclamation. Geophysical research experiments and development of software for subsurface characterization and detection of contaminants have been conducted with the USGS and DOE's Lawrence Berkeley National Laboratory.

EPA has coordinated with DOD's SERDP in an ongoing partnership, especially in the areas of sustainability research and of incorporating materials lifecycle analysis into the manufacturing process for weapons and military equipment. EPA has collaborated with the Army as part of their Net Zero Initiative, to develop and demonstrate innovative waste technologies to accomplish the Army's goal of net zero energy, water, and waste by 2020.

Several federal agencies sponsor research on variability and susceptibility in risks from exposure to environmental contaminants. EPA has collaborated with a number of the Institutes within the NIH and CDC. For example, the NIEHS conducts multi-disciplinary biomedical research programs, prevention and intervention efforts, and communication strategies. The NIEHS program includes an effort to study the effects of chemicals, including pesticides and other toxics, on children. EPA has collaborated with NIEHS in supporting the Centers for Children's Environmental Health and Disease Prevention, which study whether and how environmental factors play a role in children's health and with the National Institute on Child Health and Human Development (NICHD) on the development and implementation of the National Children's Study.

[1] For more information, please go to: Interagency Steering Committee on Multimedia Environmental Models MOU, at: http://www.iscmem.org/Memorandum.htm.

Additionally, EPA, the National Institute on Minority Health and Health Disparities (NIMHD), NIEHS, and NICHD co-fund the Centers of Excellence for Research on Environmental Health Disparities. This funding has broadened research on disadvantaged communities and the impacts of greater exposures of ambient hazards.

*Superfund Remedial Program*

The Superfund Remedial program has coordinated with several other federal agencies, such as the ATSDR and NIEHS, in providing numerous Superfund related services in order to accomplish the program's mission.

The ACE substantially contributes to Superfund site cleanups by providing a wide range of technical, management and acquisition support functions to implement or oversee responsible party Superfund project implementation for the remedial and removal programs. Most notably, this federal partner has the technical design and construction expertise and contracting capability needed to assist EPA regional Superfund programs in implementing complex Superfund remedial action projects.

This Agency also provides technical on-site support to regional offices in the enforcement oversight of numerous construction projects performed by private Potentially Responsible Parties.

*Superfund Federal Facilities Restoration and Reuse Program*

The Superfund Federal Facilities Restoration and Reuse program has coordinated with federal agencies, states, tribes, state associations, and others to implement its statutory responsibilities to ensure protective and efficient cleanup and reuse of federally contaminated land on the National Priorities List (NPL). In addition, EPA recently convened a Superfund Task Force (SFTF) that identified recommendations to streamline and improve the Superfund process. Successful implementation of these recommendations requires strengthening partnerships and increasing engagement with stakeholders such as Other Federal Agencies (OFAs).

For the past two years, EPA has participated in a dialogue with the Environmental Council of the States (ECOS) and DOE. The purpose of the DOE/EPA/ECOS Dialogue is to improve/enhance ongoing working relationships among senior leaders involved in the cleanup of DOE Environmental Management sites. The Dialogue is an example of how each agency can advance the cleanup at DOE sites and foster an understanding of challenges and successes at the national level.

The program has facilitated early transfer of property and provided technical and regulatory oversight at federal facilities to ensure human health and the environment are protected. The program has worked with federal partners to target high priority sites, to consider best practices to develop innovative solutions to emerging and unique contaminants, and implement strategies to address the remaining Federal Facility Superfund sites that have not reached cleanup completion.

To ensure the long-term protectiveness of remedies, the Agency will continue monitoring, overseeing progress, and improving the quality and consistency of five-year reviews being

conducted at federal facility NPL sites where waste has been left in place and land use is restricted. Five-year reviews are required under Section 121(c) of CERCLA, and EPA's role is to concur or make its own independent protectiveness finding. EPA has worked collaboratively with DOD, DOE and DOI, through a Federal Workgroup, to improve the technical quality, timeliness, and cost of the five-year review reports and to ensure that the community is aware of the protectiveness of the remedy. The workgroup assesses the use of best management practices and evaluate trend data to improve the five-year review process.

EPA has participated with other federal agencies on the Federal Mining Dialogue (FMD). The FMD is a cooperative initiative among federal environmental and land management agencies. It provides a national level forum for federal agencies to identify and discuss lessons learned and technical mining impact issues associated with the cleanup and reuse of abandoned and inactive hard rock and abandoned uranium mines across the country. EPA Abandoned Mine Lands Program has coordinated through the agency's National Mining Team (NMT). EPA's NMT has representatives on each of the FMD workgroups: Data Standards, Best Practices, Cost Recovery and Watershed Strategy.

EPA also has participated with other federal agencies on the Munitions Response Dialogue (MRD). The MRD is a multi-agency dialogue with EPA, DOD, Federal Land Managers and states to identify and discuss issues arising from munitions site cleanups throughout the country.

EPA partners with the DOD research and development programs (SERDP and ESTCP) munitions management track which develops technologies that further munitions cleanups at Superfund sites.

EPA and DOD have participated on the Intergovernmental Data Quality Task Force (IDQTF). The IDQTF was established to address real and perceived inconsistencies and deficiencies in quality control for laboratory data within and across governmental organizations which result in greater costs, time delays, and an increase in the potential for risks. The task force is working to ensure that environmental data are of known and documented quality, and suitable for their intended uses.

The Superfund Federal Facilities Restoration and Reuse program has developed and implemented innovative technologies, processes and collaboration efforts. By working in concert with other federal agencies, EPA has promoted the advancement of cleanup technologies, expansion of contaminated land reuse to support renewable energy projects, and multiple initiatives to support sustainability. These projects not only help support the Agency's goal to cleanup communities, but they also facilitate the introduction of innovative solutions to both the public and private sector.

*Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) Polychlorinated Biphenyl (PCB) Programs*

The RCRA Corrective Action program has coordinated closely with other federal agencies, primarily the DOD and DOE, which have many sites in the corrective action universe. An agency top priority is to assist federal facilities meet the RCRA Corrective Action program's goals of investigating and cleaning up hazardous releases remains. EPA also has coordinated with other agencies, primarily DOD, on cleanup and disposal issues posed by polychlorinated biphenyls (PCBs) under the authority of the Toxic Substances Control Act (TSCA).

*Emergency Preparedness and Response*

EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. EPA implements the Emergency Preparedness program in coordination with the DHS through the USCG acting as the chair for the National Response Team and co-chair for each Regional Response Team. These teams, which have member participation from other key federal agencies, deliver federal assistance to state, local, and tribal governments to plan for and respond to natural disasters and other major environmental incidents. This requires coordination with many federal, state, and local agencies. The Agency participates with other federal agencies to develop national planning and implementation policies at the operational level.

The National Response Framework (NRF), under the direction of the DHS, provides for the delivery of federal assistance to states to help them deal with the consequences of terrorist events, acts of malfeasance, as well as natural and other significant disasters. EPA has maintained the lead responsibility for the NRF's Emergency Support Function #10 covering inland hazardous materials and petroleum releases and participates in the Federal Emergency Support Function Leaders Group which addresses NRF planning and implementation at the operational level. As an example of the NRF functionality, EPA closely collaborated with DHS, FEMA, and other federal agencies in responding to the FY 2017 hurricane season and the wildfires in California.

EPA has coordinated its preparedness activities with DHS, FEMA, the Federal Bureau of Investigation, and other federal agencies, states and local governments. EPA will continue to clarify its roles and responsibilities to ensure that Agency security programs are consistent with the national homeland security strategy.

EPA also has worked with FEMA on hazard mitigation and recovery through a Memorandum of Agreement (MOA). This MOA has allowed EPA and FEMA to collaborate on policies, as well as with other agencies like NOAA, HUD and DOT, to expand efforts to deliver targeted assistance to communities recovering from natural disasters.

*Oil Spills*

Under the Oil Spill Program, EPA has provided assistance to agencies such as FWS and the USCG work in coordination to address oil spills nationwide. EPA also has provided assistance to agencies with judicial referrals when enforcement of violations becomes necessary. In addition, EPA and the USCG work in coordination to address oil spills nationwide.

*Homeland Security*

Homeland Security research has been conducted in collaboration with numerous agencies, leveraging funding across multiple programs to produce synergistic results. EPA's Homeland Security Research Program has worked closely with the DHS to assure that EPA, in its role as a lead agency responsible for cleanup during a Stafford Act declaration under ESF-10 and as the lead agency for water infrastructure, has the science to back decisions. Recognizing that the DOD has significant expertise and facilities related to biological and chemical warfare agents, EPA has

worked closely with the Edgewood Chemical and Biological Center (ECBC), the Technical Support Working Group, the ACE, U.S. Air Force, and other DOD organizations to address areas of mutual interest and concern related to both cleanup and water infrastructure protection. To identify and support these collaborations, EPA has participated in a tri-agency research partnership (Technical Coordination Working Group – TCWG) with the DOD and DHS that focuses on chemical and biological defense needs and gaps as they relate to homeland security. TCWG activities include: information sharing, joint science and technology research projects and complementing policies. These efforts have improved the preparedness of the U.S. domestic authorities to detect, deter, protect against, respond to, and recover from chemical or biological attack. In conducting biological agent research, EPA also has collaborated with the CDC. The program also has conducted joint research with USDA and DOI focusing on addressing homeland security threats at the intersection of the environment/public health and agriculture/natural resources. EPA has worked with DOE to access and conduct research at the DOE's National Laboratories specialized research facilities.

*Strengthen Human Health and Environmental Protection in Indian Country*

EPA has a long history of working with other federal agencies to address shared environmental and human health concerns. EPA, and the DOI, DHHS, USDA and HUD, have worked through several MOUs as partners to improve infrastructure on tribal lands.

All five federal partners renewed their commitment to the Infrastructure Task Force in 2013 by signing an MOU to continue federal coordination in delivering services to tribal communities. The Infrastructure Task Force has built on prior partner successes, including improved access to funding and reduced administrative burden for tribal communities through the review and streamlining of Agency policies, regulations, and directives as well as improved coordination of technical assistance to water service providers and solid waste managers through regular coordination meetings and web-based tools.

**Chemical Safety and Pollution Prevention Programs**

EPA has coordinated with and used information from many federal departments and agencies, as well as many state departments/agencies and international organizations, in efforts to protect America's health and environment from unacceptable risks from pesticides and toxic chemicals. EPA's activities include collaboration with individual government organizations on specific technical or regulatory issues and more broadly with groups of organizations on a range of issues. Many of these activities are described below.

To fulfill EPA's responsibilities for regulating the sale and use of pesticides, the Agency has used a range of outreach and coordination approaches for pesticide users and other stakeholders, government agencies, and the general public. Outreach and coordination activities through field programs have been essential to effective implementation of regulatory decisions governing the sale and use of pesticides. Coordination activities have protected workers and the environment, including pollinators and other non-target species, provided training for pesticide applicators, promoted integrated pest management and environmental stewardship, supported compliance through EPA's regional offices and those of the states and tribes, and promoted international cooperation.

EPA's coordination with the Departments of Agriculture, Defense, Energy and Interior, and state lead agencies for pesticides, has supported the Certification and Training program for pesticide applicators who use the riskiest pesticides. States also play an important role in developing and implementing Worker Protection programs and are involved in numerous special projects and investigations, including emergency response efforts. EPA's regional offices have provided technical guidance and assistance to the states and tribes in the implementation of all pesticide program activities.

EPA also supports the USDA's Cooperative Extension Service, which designs and delivers specialized training for various groups, including applicators of restricted use pesticides, by providing funding and developing training manuals. Such training has included instructing private and commercial applicators on the proper use of personal protective equipment and application equipment calibration, handling spill and injury situations, farm family safety, preventing pesticide spray drift, and pesticide and container disposal. Other specialized training has been provided to public works employees on grounds maintenance, to pest control operators on proper insect identification, and on weed control for agribusiness.

EPA has relied on data from HHS and USDA to supplement data from the pesticide industry to help the Agency assess the potential risks of pesticides in the diets of adults and children. EPA relies on food consumption data developed by HHS as part of their NHANES (National Health and Nutrition Survey) survey as a major component of EPA's dietary risk assessment for pesticides. EPA also relies on pesticide residue (concentration) data in food commodities generated by USDA in its Pesticide Data Program to improve its dietary risk assessment of pesticides. These data and those from other sources, including FDA, have helped EPA achieve its mission of protecting human health. These data sources have served as a showcase for federal cooperation on pesticide and food safety issues. Other collaborative efforts have included developing and validating methods to analyze domestic and imported food samples for chemicals of concern, such as carcinogens and neurotoxins. The Agency also has coordinated with the National Toxicology Program (NTP), CDC, ATSDR, and NIEHS on a variety of technical and communication issues and is a member of the federal Interagency Risk Assessment Consortium (IRAC), a group of more than a dozen federal agencies involved in risk assessment which meets quarterly to share ideas and coordinate thinking

While EPA is responsible for making pesticide registration and tolerance decisions, primary responsibility for FIFRA-related pesticide enforcement activities rests with the states. Under FFDCA, the FDA enforces tolerances for pesticide residues in most foods and the USDA enforces tolerances for meat, poultry, and some egg products. These joint efforts protect Americans from unhealthy pesticide residue levels.

In addition to a focus on protecting humans from pesticide risks, EPA has been engaged with other government agencies on many important environmental issues. The Agency has collaborated extensively with the USDA, the FWS, and NMFS on developing methods for assessing potential risks to endangered and threatened species and in developing approaches to mitigate unacceptable risks. EPA also has worked with USDA and many other federal agencies, state agencies, and other entities to address risks to honey bees and other pollinators that are critical to our environment and the production of food crops.

EPA has worked to promote improved health and environmental protection domestically and when feasible in other countries. This includes coordination not only with other countries, but also with international organizations, such as the CEC. EPA has cooperated with governments in other countries bilaterally or through treaties or other formal agreements and is an active participant in committees and discussions involving the OECD, Codex Alimentarus/Joint Meeting on Pesticide Residues (JMPR), NAFTA, and APEC.

EPA has developed a strong network of government, private sector and non-governmental partners working to achieve reductions in global mercury use and emissions, particularly when adverse U.S. impacts would be likely. EPA has worked closely with DOS in leading the technical and policy engagement for the United States in the Minamata Convention on Mercury. EPA provided the impetus for UNEP's Global Mercury Partnership, and the Agency has worked with developing and other developed countries in the context of that program. In addition to the DOS, EPA has collaborated closely with several federal agencies including DOE and USGS. EPA supported the Global Mercury Partnership and sharing of information through the Arctic Council on reducing releases of mercury that disproportionally impact indigenous arctic communities.

EPA has collaborated with the DOD, DHS, USDA, FDA, and other federal, tribal and state organizations on a variety of technical and policy homeland security issues. These issues focus on protecting the public and food and agriculture sectors from threats associated with use of chemical and biological agents. EPA has collaborated with these organizations on research pertaining to effective disinfectants for high threat microorganisms, planning for response to various potential incidents, training and development of policies and guidelines. EPA has continued to partner with the OSHA, NIOSH, and Consumer Product Safety Commission on risk assessment and risk mitigation activities.

One of the Agency's most valuable resources on pesticide issues has been the Pesticide Program Dialogue Committee (PPDC), a representative Federal Advisory Committee, which brings together a broad cross-section of knowledgeable individuals from organizations representing divergent views to discuss pesticide regulatory, policy, and implementation issues. The PPDC consists of members from federal and state government agencies, industry/trade associations, pesticide user and commodity groups, consumer and environmental/public interest groups, and others. The PPDC has provided a structured environment for meaningful information exchanges and consensus building discussions, keeping the public involved in decisions that affect them. Dialogue with outside groups is essential if the Agency is to remain responsive to the needs of the affected public, growers, and industry organizations.

To effectively participate in international agreements on chemicals (e.g., persistent organic pollutants [POPs], mercury and heavy metals), EPA has continued to coordinate with other federal agencies and external stakeholders, such as Congressional staff, industry and environmental groups. Similarly, the Agency typically coordinates with the NTP, ATSDR, NIEHS, and the CPSC on matters relating to OECD test guideline harmonization.

As part of EPA's chemical safety program, the Agency is implementing the TSCA, as amended by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act*, signed into law on June 22, 2016. EPA will continue to conduct existing chemical prioritization and risk evaluation efforts

under the provisions of TSCA, as amended, and address any unreasonable risks identified through such evaluations. With many new technical requirements and deadlines in place, EPA intends to monitor its progress closely through a suite of five-year strategic and annual measures and targets addressing the agency's core responsibilities to conduct risk evaluations, risk management actions and new chemical reviews within the timeframes set by the statute.

In 2016, following enactment of the new law, the Agency established a Senior Leaders Forum to share information with other federal agencies on its implementation of prioritization, risk evaluations and risk management mandates, including data sharing regarding chemical uses and conditions of use, exposures and hazards. Participants include the HUD, DOD, CDC, ATSDR, OSHA, MSHA, NIOSH and CPSC. These ongoing exchanges on chemicals of common interest foster improved communication and coordination on scientific, health, and regulatory issues and foster and facilitate the new requirement for consulting with relevant Federal Agencies, codified in the final TSCA Risk Evaluation rule (40 CFR 702.39).

In implementing TSCA as amended, EPA also has been seeking input from other federal agencies to help inform the Agency's efforts through the interagency Committee on Toxicity Assessment (CTA). EPA's discussions with the CTA and other federal agencies help to inform and keep current the federal network on cross-agency technical understandings and support the senior leader discussions.

EPA is committed to fulfilment of all of EPA's Indian Policies and adhering to the Chemical Safety and Pollution Prevention Program's Tribal Strategic Plan. The program has participated in EPA's meetings with the National Tribal Operations Committee (NTOC) and other tribal engagement groups on a wide variety of related activities and actions that impact tribal governments, lands, and communities. EPA is continuing to discuss with tribes any issues relating to implementation of the 2016 TSCA amendments. In addition, the National Tribal Toxics Council (NTTC) provides tribes with an opportunity for offering advice on the development of EPA chemical management programs that affect tribes, policies, and activities. EPA has met with the NTTC in person twice per year and conducts monthly teleconferences with its members.

*Research*

EPA's Toxicity Forecaster (ToxCast™) is part of an ongoing multi-agency effort under the Tox21 collaboration MOU. Tox21 has pooled chemical research, data and screening tools from multiple federal agencies including EPA, the NIH and FDA. ToxCast™ has utilized existing resources to develop faster, more thorough predictions of how chemicals will affect human and environmental health. Tox21 and ToxCast™ are currently screening nearly 10,000 environmental chemicals for potential toxicity in high-throughput screening assays at the NIH National Center for Advancing Translational Sciences (NCATS). EPA also has an agreement to provide NCATS funding to support the effort.

EPA recently announced the public release of chemical screening data on 1,800 chemicals that was gathered through advanced techniques, including robotics and high-throughput screening, as part of the ongoing Tox21 federal collaboration to improve chemical screening.

Health Canada and EPA have collaborated to explore approaches for using new data streams to assess chemicals for potential risks to human health. Health Canada is currently under a regulatory mandate to develop Chemical Management Plan 3 (CMP3). The chemicals in CMP3 include chemicals lacking traditional toxicity data. Health Canada is working with EPA's Chemical Safety for Sustainability (CSS) program to determine how to use high-throughput screening data and other types of non-traditional chemical data to help fill the data gaps for the chemicals in CMP3.

EPA has coordinated its nanotechnology research with other federal agencies through the National Nanotechnology Initiative (NNI),[2] which is managed under the Subcommittee on Nanoscale Science, Engineering and Technology (NSET) of the NSTC Committee on Technology (CoT). EPA has collaborated with many federal agencies in the development of a government-wide approach to nanotechnology research through the Committee on Environment, Natural Resources, and Sustainability Charter (CENRS) at the OSTP. EPA and the CPSC have collaborated to develop protocols to assess the potential release of nanomaterials from consumer products; develop credible rules for consumer product testing to evaluate exposure; and determine potential public health impacts of nanomaterial used in consumer products.

EPA has coordinated its research on endocrine disruptors with other federal agencies through the interagency working group on endocrine disruptors under the auspices of the Toxics and Risk Subcommittee of the CENRS. EPA has coordinated its biotechnology research through the interagency biotechnology research working group and the agricultural biotechnology risk analysis working group of the Biotechnology Subcommittee of NSTC's Committee on Science.

EPA has consulted extensively with other federal agencies about the science of individual Integrated Risk Information System (IRIS) assessments, as well as improvements to the IRIS program, through an interagency working group including public health agencies (e.g., CDC, ATSDR, NIOSH, and NIEHS), many other agencies (e.g., DOD, NASA, SBA, DOT, DOE, DOI, etc.), and White House offices (e.g., OMB, OSTP, and CEQ). EPA also has coordinated with ATSDR through a memorandum of understanding on the development of toxicological reviews and toxicology profiles, respectively. In addition, EPA has contracted with the National Academy of Sciences' National Research Council (NRC) on very difficult and complex human health risk assessments through consultation or review. Most recently, EPA convened an interagency working group, co-chaired by EPA and the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB), to review the IRIS Program's progress and enhancements following the 2014 NAS report recommendations. The working group includes relevant executive branch stakeholders, such as SBA, HHS, DOE, DOD, and CPSC. The NRC is currently working towards convening a public meeting and independently reviewing the progress of the IRIS program's implementations of the latest NRC recommendations.

## Enforcement and Compliance Assurance Programs

The Enforcement and Compliance Assurance Program has coordinated closely with the DOJ on all civil and criminal environmental enforcement matters. In addition, the program has coordinated with other agencies on specific environmental issues as described herein.

[2] For more information, see http://www.nano.gov.

The Enforcement and Compliance Assurance program has coordinated with the Chemical Safety and Hazard Investigation Board, OSHA, and ATSDR in preventing and responding to accidental releases and endangerment situations. Additionally, the program has coordinated with the BIA and the Indian Health Service on issues relative to compliance with environmental laws in Indian country. Furthermore, the program has coordinated with the SBA on the implementation of the SBREFA. The program also has shared information with the IRS on cases that require defendants to pay civil penalties, thereby assisting the IRS in assuring compliance with tax laws. In addition, it has collaborated with the SBA to maintain current environmental compliance information at Business.gov, a website initiated as an e-government initiative in 2004, to help small businesses comply with government regulations. Coordination also has occurred with the ACE on wetlands issues.

The USDA's NRCS has had a major role in determining whether areas on agricultural lands meet the definition of wetlands for purposes of the Food Security Act and civil enforcement works with them as necessary. EPA's Enforcement and Compliance Assurance program also has coordinated with USDA on the regulation of animal feeding operations and on food safety issues arising from the misuse of pesticides and shares joint jurisdiction with the Federal Trade Commission (FTC) on pesticide labeling and advertising. EPA has worked with Customs and Border Protection on implementing the secure International Trade Data System across all federal agencies and on pesticide imports and on hazardous waste and Cathode Ray Tube exports, as well as on a variety of other import/export issues under the various statutes (e.g., imports of vehicles and engines).

EPA and the FDA share jurisdiction over general-purpose disinfectants used on non-critical surfaces and some dental and medical equipment surfaces. EPA and FDA also have collaborated and shared information on Good Laboratory Program inspections to avoid duplication of inspections and maximize efficient use of limited resources. The Agency has entered into an agreement with the HUD concerning enforcement of the TSCA lead-based paint notification requirements. The Agency has coordinated with the USCG under the Act to Prevent Pollution from Ships, and on discharges of pollutant from ships and oil spills under the CWA. The Enforcement and Compliance Assurance Program also works with the DOI on CWA permit enforcement on the Outer Continental Shelf, as well as both the Interior and Transportation Departments on CWA requirements for offshore facilities.

EPA's Criminal Enforcement Program, FBI, Customs, DOL, U.S. Treasury, USCG, DOI and DOJ and with international, state, tribal, and local law enforcement organizations in the investigation and prosecution of environmental crimes. EPA also has actively worked with DOJ to establish task forces that bring together federal, state, tribal, and local law enforcement organizations to address environmental crimes. In addition, the program has an Interagency Agreement with the DHS to provide specialized criminal environmental training to federal, state, local, and tribal law enforcement personnel at the Federal Law Enforcement Center (FLETC) in Glynco, Georgia.

Executive Order 12088 on *Federal Compliance with Pollution Control Standards*, directs EPA to monitor compliance by federal agencies with all environmental laws. The Federal Facility Enforcement program has coordinated with other federal agencies, states, local and tribal governments to ensure compliance by federal agencies with all environmental laws. EPA works through the Federal Facilities Environmental Stewardship and Compliance Assistance Center

(www.fedcenter.gov), which is now governed by a board of more than a dozen contributing federal agencies. EPA also partners with other federal agencies to identify ways to expedite cleanup of Superfund sites and prevent and address regulatory compliance issues. For example, EPA meets quarterly with the DOD on general compliance matters and participates in a periodic Dialogue with the DOE on cleanup matters.

The Enforcement and Compliance Assurance program has collaborated closely with the states and tribes. States perform the vast majority of inspections, direct compliance assistance and enforcement actions for many of EPA's environmental programs. The core federal environmental statutes envision a partnership between EPA and the states and tribes under which EPA develops national standards and policies and the states and tribes implement the program under authority by EPA. If a state or tribe does not seek approval of a program, EPA must implement that program in that state or Indian country. Historically, the level of state approvals has increased as programs mature and state capacity expands. Nearly all states are authorized for the core water, air, and hazardous waste programs. EPA, however, directly implements the majority of federal environmental programs in Indian country while actively working with tribes to develop their capacity to administer environmental programs and to enable tribes that choose to implement federal environmental laws and programs for their lands. EPA has coordinated with states and tribes on training, compliance assistance, capacity building, and enforcement. EPA has worked to enhance the network of state and tribal compliance assistance providers.

EPA has worked directly with Canada and Mexico bilaterally and in the Trilateral CEC. EPA's border activities require close coordination with the Bureau of Customs and Border Protection, FWS, DOJ, DOS, and the States of Arizona, California, New Mexico and Texas. EPA is the lead agency and coordinates U.S. participation in the CEC. EPA has worked with the NOAA, FWS and USGS on CEC projects to promote biodiversity cooperation and with the USTR to reduce potential trade and environmental impacts such as invasive species.

The Enforcement and Compliance Assurance program, together with EPA's International program, has provided training and capacity building to foreign governments to improve their compliance and enforcement programs. This support has helped create a level playing field for U.S. businesses engaged in global competition, helped other countries improve their environmental conditions, and ensured U.S. compliance with obligations for environmental cooperation as outlined in various free trade agreements. In support of these activities, EPA has worked closely with DOS, U.S. Embassies, USAID, USTR, DOJ, USFS, DOI and the International Law Enforcement Academies. EPA also has participated in the OECD Mutual Acceptance of Data program, designed to garner international recognition of testing data in support of pesticides and chemical registrations.

*Superfund Enforcement*

The Enforcement and Compliance Assurance program has coordinated with other federal agencies in their use of CERCLA enforcement authority. This includes the coordinated use of CERCLA enforcement authority at individual hazardous waste sites that are located on both nonfederal land (EPA jurisdiction) and federal lands (other agency jurisdiction). As required by Executive Order 13016 amending Executive Order 12580, EPA also reviews and concurs on the use of CERCLA Section 106 authority by other departments and agencies.

EPA also coordinates with Natural Resource Trustees (DOI, USDA, DOC, DOE and DOD) to ensure that appropriate and timely notices, required under CERCLA, are sent to the Natural Resource Trustees notifying them of potential damages to natural resources. EPA also coordinates with Natural Resource Trustees on natural resource damage assessments, investigations, and planning of response activities under Section 104 of CERCLA. When an enforcement action is initiated at a site where hazardous substances are found to have caused damages to natural resources, EPA coordinates with the Natural Resource Trustees by including them, where appropriate, in negotiations with potentially responsible parties concerning the releases that have caused those damages.

The DOJ also has provided assistance to EPA with judicial referrals seeking recovery of response costs incurred by the U.S., injunctive relief to implement response actions, or enforcement of other CERCLA requirements.

Under Executive Order 12580, EPA's Superfund Federal Facilities Enforcement program has assisted federal agencies in complying with CERCLA, and ensured that: (1) all federal facility sites on the National Priorities List have interagency agreements, also known as Federal Facility Agreements (FFAs) with enforceable cleanup schedules; (2) FFAs are monitored for compliance; (3) federal sites are transferred to new owners in an environmentally responsible manner; and (4) compliance assistance is available to the extent possible. This program also ensures that federal agencies comply with Superfund cleanup obligations "in the same manner and to the same extent" as private entities. To enable the cleanup and reuse of such sites, the Federal Facilities Enforcement Program also has coordinated creative solutions that help restore facilities so they can once again serve an important role in the economy and welfare of local communities, and the country.

## Coordination with Other Federal Agencies

## Internal Operations Programs

### Office of the Administrator (OA)

The OA supports the leadership of Environmental Protection Agency's (EPA) programs and activities to protect human health and safeguard the air, water, and land upon which life depends. Several program responsibilities include congressional and intergovernmental relations, regulatory management and economic analysis, program evaluation, intelligence coordination, the Science Advisory Board, children's health, the small business program, environmental training, and outreach.

EPA's Office of Policy (OP) interacts with a number of federal agencies during its rulemaking activities. Per governing statutes and agency priorities, OP submits "significant" regulatory actions to the Office of Management and Budget (OMB) for interagency review prior to signature and publication in the *Federal Register*. In addition, OP coordinates EPA's review of other agency's regulatory actions submitted to OMB for review. Under the Congressional Review Act, rules are submitted to each House of Congress and to the Comptroller General of the United States. OP reviews, edits, tracks, and submits regulatory actions and other documents that are published by the Office of the Federal Register. For regulations that may have a significant economic impact on a substantial number of small entities, OP collaborates extensively with the Small Business Administration and OMB. Finally, OP also leads EPA's review of draft Executive Orders and Presidential Memoranda.

From time to time, OP collaborates with other federal regulatory and natural resource agencies (e.g., the United States Department of Agriculture (USDA), the Department of Energy (DOE), Department of the Interior (DOI), and the National Oceanic Atmospheric Administration (NOAA) to collect economic data used in the conduct of economic cost-benefit analyses of environmental regulations and policies and to foster improved interdisciplinary research and reporting of economic information. This is achieved in several ways, such as representing EPA on interagency workgroups or committees tasked with measuring the economic costs and benefits of federal policies and programs.

OP supports interagency, government-wide efforts that do not fall within the scope of any single program office. For example, OP is a key participant in government-wide discussions on the application of sustainable purchasing practices in federal acquisitions. In this effort, OP has partnered with acquisition leaders in the USDA, the Department of Defense (DOD), the DOE, the Department of Health and Human Services (DHHS), the Department of Homeland Security (DHS), the General Services Administration (GSA), the National Aeronautics and Space Administration (NASA), and others to ensure that federal spending meets or exceeds federal sustainability requirements. This network of federal procurement professionals is seeking to integrate sustainability into purchasing in a way that makes the process simpler and more effective for all involved.

The Administrator of EPA and the Secretary of the HHS co-chair the President's Task Force on Environmental Health Risks and Safety Risks to Children. The Task Force comprises head of 17 federal departments, agencies and White House offices. A senior staff steering committee, co-chaired by the Director of EPA's Office of Children's Health Protection **(**OCHP), coordinates interagency cooperation on Task Force priority areas. As part of this effort, the program may coordinate with other related agencies to improve federal government-wide support in implementing children's health legislative mandates and children's health outreach. This may include providing children's environmental health expertise on interagency activities and coordinating expertise from program offices.

**Office of the Chief Financial Officer (OCFO)**

OCFO makes active contributions to standing interagency management committees, including the Chief Financial Officers Council, focusing on improving resources management and accountability throughout the federal government. OCFO actively participates on the Performance Improvement Council, which coordinates and develops strategic plans, performance plans, and performance reports as required by law. In addition, OCFO participates in numerous OMB-led E-Government initiatives such as the Financial Management and Budget Formulation and Execution Lines of Business and has interagency agreements with the DOI's Interior Business Center (IBC) for processing agency payroll.

OCFO provides government-to-government employee relocation services via interagency agreements through EPA's Federal Employee Relocation Center (FERC) as a Working Capital Fund (WCF) activity. EPA-FERC provides "one-stop shop" domestic and international relocation services to other federal agencies to increase operational efficiency and save the government money. EPA-FERC currently provides relocation services internally to all EPA regions and program offices, and externally to the Transportation Security Administration (TSA), Department of Labor (DOL), Office of Personnel Management (OPM), United States Patent and Trademark Office (USPTO), Health & Human Services (HHS) and the United States Department of Agriculture (USDA).

OCFO participates with the Bureau of Census in maintaining the Federal Assistance Awards Data System. OCFO also coordinates appropriately with Congress and other federal agencies, such as the Department of Treasury, the Government Accountability Office (GAO), and GSA.

OCFO also supports EPA's Deputy Administrator as the Agency's representative on the President's Management Council. The President's Management Council oversees developing and implementing Cross-Agency Priority (CAP) goals. CAP goals are designed to overcome barriers and achieve better performance than one agency can achieve on its own. EPA will continue its work supporting the CAP goals.

**Office of Administration and Resources Management (OARM)**

OARM is committed to working with federal partners that focus on improving management and accountability throughout the federal government. OARM provides leadership and expertise to government–wide activities in various areas of human resources, grants management, contracts

management, suspension and debarment, and homeland security. These activities include specific collaboration efforts with federal agencies and departments through:

- Chief Human Capital Officers, a group of senior leaders that discuss human capital initiatives across the federal government.

- The Legislative and Policy Committee, a committee comprised of other federal agency representatives who assist the OPM in developing plans and policies for training and development across the government.

- The Chief Acquisition Officers Council, the principal interagency forum for monitoring and improving the federal acquisition system. The Council also is focused on promoting the President's specific initiatives and policies in all aspects of the acquisition system.

- The Award Committee for E-Government (E-Gov), which provides strategic vision for the portfolio of systems/federal wide supporting both federal acquisition and financial assistance. Support also is provided to the associated functional community groups, including the Procurement Committee for E-Gov, the Financial Assistance Committee for E-Gov, and the Intergovernmental Transaction Working Group.

- The Interagency Suspension and Debarment Committee (ISDC), a representative committee of federal agency leaders in suspension and debarment. The Committee facilitates lead agency coordination, serves as a forum to discuss current suspension and debarment related issues, and assists in developing unified federal policy. Besides actively participating in the ISDC, OARM: 1) provides instructors for the National Suspension and Debarment Training Program offered through the Federal Law Enforcement Training Center, and 2) supports the development of coursework and training on the suspension and debarment process for the Inspector General Academy and the Council of the Inspectors General on Integrity and Efficiency.

- The Financial Management Line of Business (FMLoB), which has been expanded to also encompass the Grants Management Line of Business. The combined FMLoB, with the Department of Treasury as the managing partner, will more closely align the financial assistance and financial management communities around effective and efficient management of funds. OARM also participates in the Grants.gov Users' Group, as well as the Federal Demonstration Partnership which is designed to reduce the administrative burdens associated with research grants.

- The Partnership for Sustainable Communities initiative, a collaborative effort with the Department of Housing and Urban Development and the Department of Transportation, improves the alignment and delivery of grant resources to communities designated under certain environmental programs. It also helps identify cases in the program that may warrant consideration of suspension and debarment.

- The Interagency Committee on Federal Advisory Committee Management (Committee Management Officer Council), which provides leadership and coordination on federal

advisory committee issues and promotes effective and efficient committee operations government-wide. In addition to serving on the Council, OARM works with the GSA Committee Management Secretariat to establish and renew advisory committees, conduct annual reviews of advisory committee activities and accomplishments, maintain committee information in a publicly accessible online database, and develop committee management regulations, guidance, and training. Further, OARM participates on the GSA Federal Advisory Committee Act (FACA) Attorney Council Interagency Workgroup to keep abreast of developments in the statutory language, case law, interpretation and implementation of the FACA.

- The Interagency Security Committee (ISC) is the leading organization for nonmilitary federal departments and agencies in establishing policies for the security and protection of Federal facilities, developing security standards and ensuring compliance with those standards. OARM participates in the ISC as a primary member and in sub-committees and workgroups in order to facilitate EPA's compliance with ISC standards for facilities nationwide.

- The Office of Personnel Management Background Investigations Stakeholder Group (BISG) is a collaborative organization that is derived from the Intelligence Reform and Terrorism Prevention Act of 2004. The BISG is comprised of senior security officials across the federal government who are responsible for the submission, adjudication and/or oversight of personnel security programs. OARM works with this group regularly to discuss topics regarding back ground investigations, focusing on standardizing and improving EPA's personnel security program.

In addition, throughout FY 2018 and FY 2019, OARM will continue working with the DOI's IBC, which is an OPM and OMB approved Human Resources Line of Business shared service center. IBC offers HR transactional processing, compensation management and payroll processing, benefits administration, time and attendance, HR reporting, talent acquisition systems, and talent management systems. OARM also continues its charter membership on the OPM HR Line of Business Multi Agency Executive Strategy Committee (MAESC), providing advice and recommendations to the Director of OPM as well as additional government-wide executive leadership, for the implementation of the HR Line of Business vision, goals, and objectives. OARM also is working with OMB, GSA, DHS, and Department of Commerce's National Institute of Standards and Technology to continue to implement the Smart Card program.

**Office of Environmental Information (OEI)**

To support EPA's overall mission, OEI collaborates with a number of other federal agencies, states, and tribal governments on a variety of initiatives, including making government more efficient and transparent, protecting human health and the environment, and assisting in homeland security. OEI is primarily involved in the information technology (IT), information management (IM), and information security aspects of the projects on which it collaborates.

**The Chief Information Officer (CIO) Council:** The CIO Council is the principal interagency forum for improving practices in the design, modernization, use, sharing, and performance of

federal information resources. The Council develops recommendations for IT/IM policies, procedures, and standards; identifies opportunities to share information resources; and assesses and addresses the needs of the federal IT workforce.

**eRulemaking**: The eRulemaking Program's mission encompasses two areas: to improve public access, participation in, and understanding of the rulemaking process; and to improve the efficiency and effectiveness of agency partners' notice and comment process when promulgating regulations. The eRulemaking Program maintains a public website, http://www.regulations.gov/, which enables the general public to access and submit comments on various documents that are published in the Federal Register, including proposed regulations and agency-specific notices. The Federal Docket Management System (FDMS) is the agency side of Regulations.gov. FDMS enables agencies to administer public submissions regarding regulatory and other documents posted by the agencies on the Regulations.gov website. The increased public access to the agencies' regulatory process enables a more informed public to provide supporting technical/legal/economic analyses to strengthen the agencies' rulemaking vehicles. The PMO, located at EPA, coordinates the operations of the eRulemaking Program through its 40 partner departments and independent agencies (comprising more than 178 agencies, boards, commissions, and offices). The administrative committee structure works with the PMO on day-to-day operations, ongoing enhancements and long-range planning for program development. These committees and boards (the Executive Steering Committee and the Advisory Board) have representative members from each partner agency and deal with contracts, budget, website improvements, improved public access, records management, and a host of other regulatory concerns that were formally only agency-specific in nature. Coordination and leadership from the OMB, Office of Information and Regulatory Affairs, and partner agencies allows for a more uniform and consistent presentation of rulemaking dockets across government. This coordination is further demonstrated by the fact that more than 90 percent of all federal rules promulgated annually are managed through the eRulemaking Program. In FY 2019, EPA will work with the Office of Management and Budget and the National Archives and Records Administration towards transferring management services to the Office of the Federal Register.

**Freedom of Information Act (FOIA):** EPA serves as the lead for the FOIAonline, a multi-agency solution that enables EPA and partner agencies to meet their responsibilities under FOIA while creating a repository of publicly released FOIA records for reuse. Partner agencies include, but are not limited to, Department of Commerce, U.S. Customs and Border Protection, Department of Defense, Small Business Administration, and Department of Justice. Through FOIAonline, the public has the ability to submit and track requests, search and download requests and responsive records, correspond with processing staff, and file appeals. Agency users are provided with a secure, login-access website to receive and store requests, assign and process requests (and refer to other agencies), post responses online, produce the annual FOIA report to the Department of Justice, and manage records electronically.

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed the Office of Management and Budget and the Department of Justice (DOJ) to build a consolidated online request portal that allows a member of the public to submit a request for records to any agency from a single website. DOJ is managing the development and maintenance of the National FOIA Portal. EPA and other federal agencies will be expected to contribute to this effort.

**The National Environmental Information Exchange Network (EN):** EPA's EN Program and the U.S. Customs and Border Protection (CBP) are coordinating on using the Automated Commercial Environment (ACE) system. This coordination will lead to automated processing of over 2.8 million EPA-related electronic filings needed to clear legitimate imports and exports at the ports. With the move from paper filings to electronic filings combined with automated processing through ACE, filing time can be reduced from weeks/days to minutes/day. This significant processing improvement directly impacts the movement of goods into commerce and the economy while helping to ensure compliance with environmental and CBP laws and regulations. It also helps the US Government keep pace with the speed of business.

The EN also is coordinating with multiple agencies via the Broadband Interagency Working Group chaired by the National Transportation and Information Agency to increase broadband access. Access to broadband is critical to fully participating in the EN and is of particular concern for tribes who often lack this access. EPA will participle on current and future workgroups to implement Presidential actions to promote the use of broadband in rural America. This includes tribal lands. EPA is currently represented on the workgroup, Leveraging Federal Assets (co-chaired by DOI and GSA).

**Automated Commercial Environment/International Trade Data System (ACE/ITDS):** ITDS is the electronic information exchange capability, or "single window," through which businesses will transmit data required by participating agencies for the import or export of cargo. ACE is the system built by Customs and Border Protection (CBP) to ensure that its customs officers and other federal agencies have the information they need to decide how to handle goods and merchandise being shipped into or out of the United States. It also will be the way those agencies provide CBP with information about potential imports/exports. ITDS eliminates the need, burden and cost of paper reporting. It also allows importers and exporters to report the same information to multiple federal agencies with a single submission, and facilitates movement of cargo by automating processing of the import and exports. ITDS provides the capability for industry to consolidate reporting for commodities regulated by multiple agencies. For these consolidated reports, the industry filers will receive the appropriate status response when their filings meet each agency's reporting requirements. Once all agency reporting requirements have been met, filers can receive a coordinated single U.S. government response to proceed into the commerce of the United States.

EPA has the responsibility and legal authority to make sure pesticides, toxic chemicals, vehicles and engines, ozone-depleting substances, and other commodities entering and hazardous waste exiting the country meet its human health and environmental standards. EPA's ongoing collaboration with CBP on the ACE/ITDS effort will improve the efficiency of processing these shipments through information exchange between EPA and CBP and automated processing of electronic filings. As resources permit, EPA will continue to work with CBP towards the goal to automate the current manual paper review process for admissibility so that importers and brokers (referred to collectively as Trade) can know before these commodities are loaded onto an airplane, truck, train, or ship if their shipment meets EPA's reporting requirements. As a result of this automated review, trade can greatly lower its cost of doing business and customs officers at our nation's ports will have the information on whether shipments comply with our environmental regulations.

**Geospatial Information:** EPA works with DOI, NOAA, U.S. Geological Survey (USGS), NASA, USDA, and DHS on developing and implementing geospatial approaches to support various business areas. It also works with 25 additional federal agencies through the activities of the federal Geographic Data Committee (FGDC) and the OMB Geospatial Line of Business (Geo LoB), for which EPA leads several key initiatives. EPA also participates in the FGDC Steering Committee and Executive Committee. A key component of this work is developing and implementing the National Spatial Data Infrastructure (NSDI) and the National GeoPlatform. The key objective of the NSDI is to make a comprehensive array of national spatial data – data that portrays features associated with a location or tagged with geographic information and can be attached to and portrayed on maps – easily accessible to both governmental and public stakeholders. Use of this data, in tandem with analytical applications, supports several key EPA and government-wide business areas. These include ensuring that human health and environmental conditions are represented in the appropriate contexts for targeting and decision making; enabling the assessment, protection and remediation of environmental conditions; and aiding emergency first responders and other homeland security activities. EPA supports geospatial initiatives through efforts such as EPA's Geospatial Platform, EPA's Environmental Dataset Gateway, the National Environmental Information Exchange Network, National Environmental Policy Act (NEPA) Assist, EPA Metadata Editor, Facilities Registry System (FRS) Web Services, and My Environment. EPA also works closely with its state, tribal, and international partners in a collaboration that enables consistent implementation of data acquisition and development, standards, and technologies supporting the efficient and cost effective sharing and use of geographically-based data and services.

## Office of the Inspector General (OIG)

EPA's Inspector General is a member of the Council of Inspectors General on Integrity and Efficiency (CIGIE), an organization comprised of federal Inspectors General (IGs), GAO, and the Federal Bureau of Investigation (FBI). The CIGIE coordinates and improves the way IGs conduct audits, investigations, and internal operations. The CIGIE also promotes joint projects of government-wide interest and reports annually to the President on the collective performance of the IG community. EPA's OIG coordinates criminal investigative activities with other law enforcement organizations such as the FBI, Secret Service, and DOJ. In addition, the OIG participates with various inter-governmental audit forums and professional associations to exchange information, share best practices, and obtain or provide training. The OIG also promotes collaboration among EPA's partners and stakeholders in its participation of Hurricane Sandy Oversight and its outreach activities. Additionally, EPA's OIG initiates and participates in collaborative audits, program evaluations, and investigations with OIGs of agencies with an environmental mission such as the DOI, USDA, as well as other federal, state, and local law enforcement agencies as prescribed by the IG Act, as amended. As required by the IG Act, EPA's OIG coordinates and shares information with the GAO. EPA's OIG currently serves as the Inspector General of the U.S. Chemical Safety and Hazard Investigations Board (CSB). EPA's OIG will continue to perform its duties with respect to CSB until otherwise directed.

## Major Management Challenges

### Introduction

The Reports Consolidation Act of 2000 requires the Inspector General to identify the most serious management challenges facing EPA, briefly assess the Agency's progress in addressing them, and report annually.

EPA has established procedures for addressing its major management challenges. EPA managers use audits, reviews, and program evaluations conducted internally and by the Office of Inspector General (OIG), the Government Accountability Office (GAO), and the Office of Management and Budget (OMB) to assess program effectiveness and identify potential management issues. The Agency recognizes that management challenges, if not addressed adequately, may prevent the Agency from effectively meeting its mission. EPA remains committed to addressing all management issues in a timely manner and to the fullest extent of its authority.

The following discussion summarizes each of the FY 2017 management challenges identified by EPA's OIG and presents the Agency's response.

### 1. Improved Oversight of States, Territories and Tribes Authorized to Accomplish Environmental Goals

***Summary of Challenge**: The OIG believes that EPA's oversight of states authorized to implement environmental programs under several statutes remains a key management challenge. The OIG notes that while progress has been made, challenges remain throughout Agency programs and many recommendations have not been fully implemented.*

**Agency Response**: The Agency continues to make state oversight an Agency priority and to improve oversight practices to ensure consistency. Some examples of the efforts the Agency has taken to address OIG's concerns include:

- Established the *State Program Health and Integrity Workgroup*. This inter-agency workgroup, which began in FY 2012, composed of EPA's national program offices for air, enforcement and water, gathers and analyzes information on oversight of state practices, identifies gaps and develops solutions.
- Reviewed a minimum of 2 percent of Title V permits issued by states and conducted at least one evaluation per region of a state, local, or tribal Title V permitting program.
- Completed draft guidance documents on program evaluation and fee oversight, which are scheduled to be finalized and issued in the Fall of 2017.
- Published the revised underground storage tank regulations (July 2015), which addressed state program approval and provided states who currently have SPA three years from the rule's effective date to submit their application for reinstatement.
- Working with the states to have revised Memorandums of Agreements to reflect program changes from the 2005 Energy Policy Act by October 2018.
- Established a state-EPA workgroup to take action on the financial indicators developed in response to recommendations concerning State Revolving Fund oversight. The Agency

believes that a range of financial indicators will provide stakeholders with a complete understanding of the financial sustainability of the Drinking Water State Revolving Funds and Clean Water State Revolving Funds.

- Improved collaboration and coordination with states in implementing Safe Drinking Water Act regulation for Public Water Systems and Underground Injection Control regulations regarding hydraulic fracturing activities. For example, the Agency coordinates with states where use of diesel fuels in hydraulic fracturing has been reported and evaluates any information regarding injection of diesel fuels for hydraulic fracturing on a case by case basis.
- Progress will be assessed beginning in FY 2018 with two new performance indicators ("Number of grant commitments achieved by states, tribes, and local communities"; and "Number of alternative shared governance approaches to address state, tribal, and local community reviews") under the *FY 2018-2022 EPA Strategic Plan* Goal 2/Objective 2.1, Enhance Shared Accountability.

**Responsible Agency Official**: Robin Richardson, Principal Deputy Associate Administrator, Office of Congressional and Intergovernmental Relations.

## 2. Enhancing Information Technology Security to Combat Cyber Threats

***Summary of Challenge:*** *The OIG acknowledges that the Agency continues to initiate actions to further strengthen or improve its information security program. However, long-standing challenges that stem from the lack of corrective actions taken by management to resolve audit findings and emerging issues the Agency faces in managing contractors raises questions about the effectiveness of EPA's information security program.*

**Agency Response**: The Agency is committed to protecting its information and technology assets. EPA understands the prevalence and complexity of the ever-growing cyber security attacks and is aware of the potential impact to the Agency's mission if information assets are compromised. The Agency has established and implemented adequate processes for tracking audit recommendations and the status of corrective actions that will help address concerns associated with this management challenge.

The Agency is developing a process to train EPA Contract Officer Representatives on their responsibilities for monitoring the contractors to ensure they meet specified EPA information security responsibilities. This includes:

- Monitoring contractors that operate information systems on behalf of EPA to ensure they perform the mandated information security assessments.
- Ensuring that contractors with significant information security responsibilities complete role-based training.

Additionally, the Agency has developed standard contract clauses to help ensure contractors implement and follow EPA and federal information security directives, including requiring contractors to complete role-based training. The Agency plans to use a checklist to guide the inclusion of pertinent clauses in all applicable contracts. The Agency plans to oversee the inclusion

of the clauses during the Federal Information Technology Acquisition Reform Act reviews and will develop and implement a method to review existing contracts to ensure the clauses are included, as appropriate. The Agency plans to implement the inclusion of standard contract clauses by the end of the first quarter of FY 2018.

The Agency will make every effort to complete corrective actions for all open recommendations by the originally agreed-upon completion dates, where feasible, by utilizing and refining processes already in place.

**Responsible Agency Official**: Robert McKinney, Acting Director, Office of Information Security and Privacy and Senior Agency Information Security Officer

## 3. EPA Needs to Improve Its Workload Analysis to Accomplish Its Mission Efficiently and Effectively

***Summary of Challenge:*** *Over the years, in general and program-specific audits, the IG recommended that the EPA attempt to quantify its overall and program-specific workload to help prioritize resources. Although the IG recognizes challenges in accurately quantifying EPA's highly variable, non-linear, and multi-year work, in many reviews the IG has continued to recommend attempting to quantify FTE workloads. The EPA believes that quantifying workload using detailed, static FTE models is not a cost effective method to prioritize resources or to inform continuing efforts to improve EPA programs and processes. To better support process improvement efforts, the Agency uses a variety of targeted trend, macro-level, and / or operational workload analyses designed to provide actionable, current and salient management information.*

**A. Agency Response:** As the OIG acknowledges, the Agency faces continuing challenges managing programs with fewer resources as well as measuring the EPA's variable workload. The Agency believes that workload analysis provides valuable insights when focused on informing efforts to improve current work process rather than attempting to estimate how many FTE a program theoretically needs. OCFO found that detailed FTE models 1) quickly became out-of-date due to changing regulations, requirements, and systems, 2) did not generate actionable data, and 3) were overly sensitive to relatively small input changes.

Especially important is the fact that detailed FTE models capture the work as it is currently performed. EPA is putting into place an organized methodology for improving business processes across the full range of agency activities. EPA's Lean Management System (ELMS) initiative aims to help deliver more customer value and improve mission outcomes. Targeted efforts will support these continuous improvement efforts by allowing the agency to efficiently reanalyze processes after improvement efforts have been implemented. Traditional FTE models can hamper these efforts by focusing on precisely calculating resource levels rather than on identifying improvement opportunities.

In a parallel effort, in the 2018 budget process, agency leadership identified critical statutory obligations and key stakeholders (particularly states and tribes) needs to inform prioritizing efforts within declining overall resource levels. Specific process improvement workload analyses have

informed targeted efforts and have included funds control, IT security, fee processing and grants project officer analyses. Given the Agency's continuing use of workload analysis tools and the new agency-wide ELMS methodology, the Agency does not believe that workload analysis represents an agency-level weakness.

**B. Agency's Strategy:** The EPA Lean Management System will create an overarching structure for ongoing process improvement. At the same time, a wide variety of workload analytical tools, including trend, macro-level workload reviews and targeted analyses of specific processes to efficiently provide critical insights into difficult budget decisions. The EPA workload analysis guidance (contained in EPA's Funds Control Manual, per the IG's recommendation) discusses several workload tools that EPA programs can use to help manage their program, operations, and resources. (The Funds Control Manual is currently under review by OMB.)

**C. Agency Activities:** Over the last few years, as discussed above, the EPA used workload analyses to inform budget decision process and to examine task-driven functions. Task-specific targeted analyses of current operations examined how much time managers and staff invest in each function's major components. These analyses helped the EPA identify major challenges and opportunities, target streamlining and Lean efforts, clarify guidance, prioritize training, and structure other support efforts and initiatives. Specific analyses included:

- Grants and Interagency Agreement Officers – I-GET (Interagency Agreement and Grants Officer Estimator Tool)
- Project officers - POET (Project Officer Estimator Tool)
- IT security officers (Information Security Task Force (ISTF) analyses of ISO (Information Security Officer) duties
- Funds Control Officers (FCOs) – FCO workload review
- Fee-related duties – Existing and new fees workload review

The Agency plans to continue to use these tools in concert with ELMS and other process improvement efforts and as one factor to inform budget decisions.

**Responsible Agency Official**: Carol Terris, Director, Office of Budget

## EPA User Fee Programs

In FY 2019, EPA will have several user fee programs in operation. These user fee programs and proposals are as follows below.

### Current Fees: Pesticides

Fees authorized by the Federal Insecticide, Fungicide, and Rodenticide Act of 1988, as amended by Public Law 112-177 Pesticide Registration Improvement Renewal Act (PRIA-3), were set to expire on September 30, 2017, but have been extended, by continuing resolution, through February 8, 2018. The bill pending in the Senate extends authority through September 30, 2020. The version passed in the House extends authority for 7 years through fiscal year 2023, and the two versions would need to be reconciled.

- **Pesticides Maintenance Fee (7 U.S.C. §136a-1(i))**

The Maintenance Fee provides funding for the Reregistration and Registration Review programs and a certain percentage supports the processing of applications involving inert ingredients and expedited processing of similar applications, such as fast track amendments. Assuming the passage of PRIA-4, in FY 2019, EPA expects to collect approximately $31.0 million from this fee program.

PRIA-4 legislation is still pending Congressional authorization; if PRIA-4 is not enacted or PRIA 3 is not extended, EPA will not be authorized to collect new maintenance fees.

- **Enhanced Registration Services (7 U.S.C. §136w-8(b))**

Entities seeking to register pesticides for use in the United States pay a fee at the time the registration action request is submitted to EPA, setting specific timeframes for the registration decision service. This process has introduced new pesticides to the market more quickly. Assuming the passage of PRIA-4, in FY 2019, EPA expects to collect approximately $17 million from this fee program.

If PRIA-4 is not enacted in FY 2018, and PRIA-3 not extended, under the sunset provisions of PRIA-3, EPA would collect 60 percent of fee amounts for applications submitted in FY 2018, and 30 percent of fee amounts for applications submitted in FY 2019.

### Current Fees: Other

- **Pre-Manufacturing Notification Fee**

The Pre-Manufacturing Notification (PMN) fees are collected for the review and processing of various types of new chemical pre-manufacturing notifications submitted to EPA by the chemical industry. These fees are paid at the time of submission of Section 5 Notices for review by EPA's Toxic Substances program. PMN fees are authorized by the Toxic Substances Control Act. Fees collected for this activity are currently deposited in the U.S. Treasury. EPA estimates that no fees will be collected under the current PMN Fee in FY 2019. On June 22, 2016, the "Frank R.

Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of the (TSCA), including providing authority for establishment of a new, broader TSCA User Fee to replace the current PMN Fee, and for the fee revenues to be deposited in an account for direct use by EPA. The rule to require these revised fees is expected to be finalized in late FY 2018.

- **Lead Accreditation and Certification Fee**

Title IV, Section 402(a)(3) mandates the development of a schedule of fees to cover the costs of administering and enforcing the standards and regulations for persons operating lead training programs accredited under the Section 402/404 rule and for lead-based paint contractors certified under this rule. The training programs ensure that lead paint abatement and renovation professionals are properly trained and certified. Fees collected for this activity are deposited in the U.S. Treasury. EPA estimates that $4.6 million will be deposited in FY 2019.

- **Motor Vehicle and Engine Compliance Program Fee**

This fee is authorized by the Clean Air Act of 1990 and is administered by the Office of Transportation and Air Quality. Fee collections for manufactures of light-duty vehicles, light- and heavy-duty trucks, and motorcycles began in August 1992. In 2004, EPA promulgated a rule that updated existing fees and established fees for newly-regulated vehicles and engines. The fees established for new compliance programs also are paid by manufacturers of heavy-duty and non-road vehicles and engines, including large diesel and gas equipment (earthmovers, tractors, forklifts, compressors, etc.), handheld and non-handheld utility engines (chainsaws, weed-whackers, leaf-blowers, lawnmowers, tillers, etc.), marine (boat motors, watercraft, jet-skis), locomotive, aircraft and recreational vehicles (off-road motorcycles, all-terrain vehicles, snowmobiles) for in-use testing and certification. In 2009, EPA added fees for evaporative emissions requirements for non-road engines. EPA intends to apply certification fees to additional industry sectors as new programs are developed. In FY 2019, EPA expects to collect approximately $22.8 million from this fee program based upon a projection of the original rulemaking cost study adjusted for inflation. EPA is not authorized to expend these collected funds.

- **WIFIA Program Fees**

The FY 2019 Budget requests authorization for the Administrator to collect and obligate fees established in accordance with Title V, Subtitle C, Sections 5029 and 5030, of Public Law 113-121, the Water Resources Reform and Development Act of 2014. These funds shall be deposited in the Water Infrastructure Finance and Innovation Program Account and remain available until expended. WIFIA fee regulations were promulgated in FY 2017. Fee revenue is for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms. The requested WIFIA program fee expenditure authority would be in addition to the $3 million request for administrative and operations expenses. Fee revenue does not take the place of the request for WIFIA administration. The appropriated administrative level and the anticipated fee revenue are both needed to successfully implement the WIFIA program. In FY 2019, EPA estimates that upward of $3 million in WIFIA fees could be collected.

**Fee Proposals: Other**

- **ENERGY STAR**

The Budget includes a proposal to authorize the EPA to administer the ENERGY STAR program through the collection of user fees. By administering the ENERGY STAR program through the collection of user fees, the EPA would continue to provide a trusted resource for consumers and businesses who want to purchase products that save them money and help protect the environment. Product manufacturers who seek to label their products under the program would pay a modest fee that would support EPA's work to set voluntary energy efficiency standards and to process applications. Through an upfront FY 2019 appropriation of $46 million to ensure continuous operation of the ENERGY STAR program, fee collections would begin after EPA undertakes a rulemaking process to determine which products would be covered by fees and the level of fees, and to ensure that a fee system would not discourage manufacturers from participating in the program or result in a loss of environmental benefits. The fee collections would provide funding to cover the upfront appropriation, and continued expenses to develop, operate, and maintain the ENERGY STAR program.

- **Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)**

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of the (TSCA). The amendments provide authority to the Agency to establish fees for certain activities under Sections 4, 5 and 6 of TSCA, as amended, to defray 25 percent of the costs of administering these Sections and Section 14. The amendments removed the previous cap that the Agency may charge for pre-manufacturing notification reviews. Fees collected under the TSCA Fees Rule will be deposited in the TSCA Service Fee Fund for use by the EPA. This fee structure, once finalized, will replace the existing Pre-Manufacturing Notification Fees.

- **FIFRA and PRIA Fee Spending Restrictions**

Current statutory language in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and (PRIA) restricts what activities EPA can fund from collections deposited in the Reregistration and Expedited Processing Revolving Fund and PRIA Fund. The FY 2019 President's Budget carries forward the proposed statutory language from the FY 2018 President's Budget. EPA understands that the passage of PRIA-4 may change the need for this proposal and will work with OMB and Congress to address this.

- **Hazardous Waste Electronic Manifest**

The Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In accordance with the Act, EPA established the e-Manifest program. EPA finalized the user fee rule, *Hazardous Waste*

*Management System: User Fees for the Electronic Hazardous Waste Manifest System and Amendments to Manifest Regulations*, in December 2017.

In FY 2019, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $43 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will be utilized for the operation of the system and necessary program expenses. Fees will fully support the e-Manifest program, including future development costs.

*The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2019.*

- **Oil Spill: Prevention, Preparedness, and Response**

The FY 2019 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for owners or operators of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act. There are approximately 4,600 FRP facilities and over 540,000 SPCC facilities. Allowing these facilities to voluntarily request and pay for a service whereby EPA conducts an on-site, walk-through of the facility will help expand awareness and understanding of accident prevention processes, improve the safety of industrial operations, and reduce inadvertent regulatory compliance violations. These fees will be deposited in the Inland Oil Spill Programs account and remain available until expended for the expenses of providing compliance assistance services. These fees are discretionary and the proposed language is included in the Administrative Provisions section. When the Agency receives Congressional authorization, the Administrator will establish procedures for making and accepting a facility's request for voluntary assistance.

- **State and Local Prevention and Preparedness**

The FY 2019 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for owners or operators of a stationary source required to prepare and submit a Risk Management Plan under Section 112(r)(7) of the Clean Air Act. There are close to 12,500 RMP facilities. Allowing these facilities to voluntarily request and pay for a service whereby EPA conducts an on-site, walk-through of the facility will help expand awareness and understanding of accident prevention processes, improve the safety of industrial operations, and reduce inadvertent regulatory compliance violations. These fees will be deposited in the Environmental Programs and Management account and remain available until September 30, 2020 for the expenses of providing compliance assistance services. These fees are discretionary and the proposed language is included in the Administrative Provisions section. When the Agency receives Congressional authorization, the Administrator will establish procedures for making and accepting a facility's request for voluntary assistance.

## Working Capital Fund

In FY 2019, the Agency will be in its 23rd year of operation of the Working Capital Fund (WCF). It is a revolving fund, authorized by law to finance a cycle of operations, where the costs of goods and services provided are charged to users on a fee-for-service basis. The funds received are available without fiscal year limitation, to continue operations and to replace capital equipment. EPA's WCF was implemented under the authority of Section 403 of the Government Management Reform Act of 1994 and the EPA's FY 1997 Appropriations Act. Permanent WCF authority was contained in the Agency's FY 1998 Appropriations Act.

EPAs Chief Financial Officer (CFO) initiated the WCF in FY 1997 as part of an effort to: (1) be accountable to Agency offices, the Office of Management and Budget, and Congress; (2) increase the efficiency of the administrative services provided to program offices; and (3) increase customer service and responsiveness. The Agency has a WCF Board which provides policy and planning oversight and advises the CFO regarding the WCF financial position. The Board, chaired by the Associate Chief Financial Officer, is comprised of twenty-three voting members from the program and regional offices.

In FY 2019, there will be eleven Agency activities provided under the WCF. These are the Agency's information technology, telecommunications operations, data services, and innovation fellowship activities managed by the Office of Environmental Information; Agency postage costs, Cincinnati voice services, certain minor facilities alterations costing less than $150,000 per project, and background investigations managed by the Office of Administration and Resource Management; financial and administrative systems, employee relocations, and a budget formulation system managed by the Office of the Chief Financial Officer; the Agency's continuity of operations site, managed by the Office of Land and Emergency Management; and regional information technology service and support managed by Region 8. A new activity for the Research Triangle Park operations and maintenance service, previously discussed as an addition in FY 2018 but subsequently delayed, has been proposed for addition in FY 2019.

In FY 2019, the RTP facility operations and maintenance service is being proposed to begin operations within the WCF. A total of $3.3 million is estimated to be shifted to the WCF, commensurate with what is being spent for FY 2018. These funds will cover preventative maintenance inspections, repairs, and service calls.

The Agency's FY 2019 budget request includes resources for these eleven activities in each National Program Manager's submission, totaling approximately $255 million. These estimated resources may be adjusted during the year to incorporate any program office's additional service needs during the operating year. To the extent that these increases are subject to Congressional reprogramming notifications, the Agency will comply with all applicable requirements. In FY 2019, the Agency will continue to perform relocation services for other federal agencies in an effort to deliver high quality services external to EPA, which will result in lower costs to EPA customers.

In FY 2018, the Agency reduced its overall working capital fund budget due to budget constraints. These constraints have continued in FY 2019 with minor increases and decreases due to several IT improvements, including increased cloud computing, cyber security requirements, continuous

diagnostic and mitigation program implementation, and bandwidth enhancements. Other funding shifts have been included in the FY 2019 WCF plan that relate to the necessary telecommunications and computer support needed by every employee. As part of an overall review and rebalancing of these costs, funds have been shifted across programs to reflect FTE changes as well.

**Environmental Protection Agency**
**Acronyms for Statutory Authority**

The following is not an exhaustive list of statutory authorities, but includes those commonly referred to by acronym in this document.

**ADA:** Americans with Disabilities Act

**ADEA:** Age Discrimination in Employment Act

**AEA:** Atomic Energy Act, as amended, and Reorganization Plan #3

**AHERA:** Asbestos Hazard Emergency Response Act

**AHPA:** Archaeological and Historic Preservation Act

**APA:** Administrative Procedures Act

**ARRA:** American Recovery and Reinvestment Act

**ASHAA:** Asbestos in Schools Hazard Abatement Act

**ASTCA:** Antarctic Science, Tourism, and Conservation Act

**BEACH Act of 2000:** Beaches Environmental Assessment and Coastal Health Act

**BRERA:** Brownfields Revitalization and Environmental Restoration Act

**CAA:** Clean Air Act

**CAAA:** Clean Air Act Amendments

**CAIR:** Clean Air Interstate Rule

**CCA:** Clinger Cohen Act

**CCAA:** Canadian Clean Air Act

**CEPA:** Canadian Environmental Protection Act

**CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act (1980)

**CFOA:** Chief Financial Officers Act

**CFR:** Code of Federal Regulations

**CICA:** Competition in Contracting Act

**CRA:** Civil Rights Act

**CSA:** Computer Security Act

**CWA:** Clean Water Act (1972)

**CWAP:** Clean Water Action Plan

**CWPPR:** Coastal Wetlands Planning, Protection, and Restoration Act of 1990

**CWSRF:** Clean Water State Revolving Fund

**CZARA:** Coastal Zone Act Reauthorization Amendments

**CZMA:** Coastal Zone Management Act

**DPA:** Deepwater Ports Act

**DREAA:** Disaster Relief and Emergency Assistance Act

**DWSRF:** Drinking Water State Revolving Fund

**ECRA:** Economic Cleanup Responsibility Act

**EFOIA:** Electronic Freedom of Information Act

**EISA:** Energy Independence and Security Act of 200**7**

**EPAct:** Energy Policy Act of 2005

**EPAA:** Environmental Programs Assistance Act

**EPAAR:** Environmental Protection Agency Acquisition Regulation

**EPCA:** Energy Policy and Conservation Act

**EPCRA:** Emergency Planning and Community Right to Know Act (1986)

**ERD&DAA:** Environmental Research, Development and Demonstration Authorization Act

**ESA:** Endangered Species Act

**ESECA:** Energy Supply and Environmental Coordination Act

**FACA:** Federal Advisory Committee Act

**FAIR:** Federal Activities Inventory Reform Act

**FASA:** Federal Acquisition Streamlining Act (1994)

**FCMA:** Fishery Conservation and Management Act

**FEPCA:** Federal Environmental Pesticide Control Act; enacted as amendments to FIFRA.

**FFDCA:** Federal Food, Drug, and Cosmetic Act

**FGCAA:** Federal Grant and Cooperative Agreement Act

**FIFRA:** Federal Insecticide, Fungicide, and Rodenticide Act (1972)

**FLPMA:** Federal Land Policy and Management Act

**FMFIA:** Federal Managers' Financial Integrity Act (1982)

**FOIA:** Freedom of Information Act

**FPA:** Federal Pesticide Act

**FPAS:** Federal Property and Administration Services Act

**FPR:** Federal Procurement Regulation

**FQPA:** Food Quality Protection Act (1996)

**FRA:** Federal Register Act

**FSA:** Food Security Act

**FSMA:** Food Safety Modernization Act

FTTA: Federal Technology Transfer Act

**FUA:** Fuel Use Act

**FWCA:** Fish and Wildlife Coordination Act

**FWPCA:** Federal Water Pollution and Control Act (aka CWA)

**GISRA:** Government Information Security Reform Act

**GMRA:** Government Management Reform Act

**GPRA:** Government Performance and Results Act (1993)

**HMTA:** Hazardous Materials Transportation Act

**HSWA:** Hazardous and Solid Waste Amendments of 1984

**IGA:** Inspector General Act

**IPA:** Intergovernmental Personnel Act

**IPIA:** Improper Payments Information Act

**ISTEA:** Intermodal Surface Transportation Efficiency Act

**ITMRA:** Information Technology Management Reform Act of 1996-aka Clinger/Cohen Act

**LPA-US/MX-BR:** 1983 La Paz Agreement on US/Mexico Border Region

**MPPRCA:** Marine Plastic Pollution, Research and Control Act of 1987

**MPRSA:** Marine Protection Research and Sanctuaries Act

**NAAEC:** North American Agreement on Environmental Cooperation

**NAAQS:** National Ambient Air Quality Standard

**NAWCA:** North American Wetlands Conservation Act

**NEPA:** National Environmental Policy Act

**NHPA:** National Historic Preservation Act

**NIPDWR:** National Interim Primary Drinking Water Regulations

**NISA:** National Invasive Species Act of 1996

**ODA:** Ocean Dumping Act

**OMTR:** Open Market Trading Rule

**OPA:** Oil Pollution Act of 1990

**OWBPA:** Older Workers Benefit Protection Act

**PBA:** Public Building Act

**PFCRA:** Program Fraud Civil Remedies Act

**PHSA:** Public Health Service Act

**PLIRRA:** Pollution Liability Insurance and Risk Retention Act

**PPA:** Pollution Prevention Act

**PR:** Privacy Act

**PRA:** Paperwork Reduction Act

**PRIA:** Pesticide Registration Improvement Act

**PRIEA:** Pesticide Registration Improvement Extension Act of 2012 (known as PRIA 3)

**PRIRA:** Pesticide Registration Improvement Renewal Act

**QCA:** Quiet Communities Act

**RCRA:** Resource Conservation and Recovery Act of 1976

**RFA:** Regulatory Flexibility Act

**RICO:** Racketeer Influenced and Corrupt Organizations Act

**RLBPHRA:** Residential Lead-Based Paint Hazard Reduction Act

**SARA:** Superfund Amendments and Reauthorization Act of 1986

**SBLRBRERA:** Small Business Liability Relief and Brownfields Revitalization and Environmental Restoration Act

**SBREFA:** Small Business Regulatory Enforcement Fairness Act of 1996

SDWA: Safe Drinking Water Act

**SICEA:** Steel Industry Compliance Extension Act

**SMCRA:** Surface Mining Control and Reclamation Act

**SPA:** Shore Protection Act of 1988

**SWDA:** Solid Waste Disposal Act

**SWTR:** Surface Water Treatment Rule

**TCA:** Tribal Cooperative Agreement

TSCA**:** Toxic Substances Control Act

**UMRA:** Unfunded Mandates Reform Act

**UMTRLWA:** Uranium Mill Tailings Radiation Land Withdrawal Act

**USC:** United States Code

**USTCA:** Underground Storage Tank Compliance Act

**WQA:** Water Quality Act of 1987

**WRDA:** Water Resources Development Act

**WSRA:** Wild and Scenic Rivers Act

**WWWQA:** Wet Weather Water Quality Act of 2000

## FY 2019 STAG Categorical Program Grants
## Statutory Authority and Eligible Uses
## (Dollars in Thousands)

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| State and Local Air Quality Management | CAA, Section 103 | Air pollution control agencies as defined in Section 302(b) of the CAA | S/L monitoring and data collection activities in support of the $PM_{2.5}$ monitoring network and associated program costs. | Goal 1, Obj. 1.1 | $36,995.0 | $41,875.0 | $41,591.0 | $29,313.0 |
| State and Local Air Quality Management | CAA, Section 103 | Air pollution control agencies as defined in Section 302(b) of the CAA | S/L monitoring and data collection activities in support of air toxics monitoring. | Goal 1, Obj. 1.1 | $5,660.3 | $6,858.0 | $6,811.0 | $6,271.0 |
| State and Local Air Quality Management | CAA, Section 103 | Air pollution control agencies as defined in Section 302(b) of the CAA | S/L monitoring procurement activities in support of the NAAQS. | Goal 1, Obj. 1.1 | $2,834.0 | $4,278.0 | $4,249.0 | $2,780.0 |

[3] Does not reflect STAG rescissions.

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| State and Local Air Quality Management | CAA, Sections 103, 105, 106 | Air pollution control agencies as defined in Section 302(b) of the CAA; Multi-jurisdictional organizations (non-profit organizations whose boards of directors or membership is made up of CAA Section 302(b) agency officers and whose mission is to support the continuing environmental programs of the States); Interstate air quality control region designated pursuant to Section 107 of the CAA or of implementing Section 176A, or Section 184 NOTE: only the Ozone Transport Commission is eligible. | Carrying out the traditional prevention and control programs required by the CAA and associated program support costs, including all monitoring activities, including PM 2.5 monitoring and associated program costs (Section 103 and/or 105); Coordinating or facilitating a multi-jurisdictional approach to carrying out the traditional prevention and control programs required by the CAA (Sections 103 and 106); Supporting training for CAA Section 302(b) air pollution control agency staff (Sections 103 and 105); Supporting research, investigative, and demonstration projects (Section 103). | Goal 1, Obj. 1.1 | $168,225.3 Section 105 grants<br>$466.0 Section 106 grants<br>**Total: $214,180.6** | $174,569.0 Section 105 grants<br>$639.0 Section 106 grants<br>**Total: $228,219.0** | $173,383.0 Section 105 grants<br>$635.0 Section 106 grants<br>**Total: $226,669.0** | $113,177.0 Section 105 grants<br>$420.0 Section 106 grants<br>**Total: $151,961.0** |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Tribal Air Quality Management | CAA, Sections 103 and 105; Tribal Cooperative Agreements (TCA) in annual Appropriations Acts. | Tribes; Intertribal Consortia; State/Tribal College or University | Conducting air quality assessment activities to determine a Tribe's need to develop a CAA program; Carrying out the traditional prevention and control programs required by the CAA and associated program costs; Supporting CAA training for Federally-recognized Tribes. | Goal 1, Obj. 1.1 | $10,027.8 Section 103 grants<br>$4,000.0 Section 105 grants<br>**Total: $14,027.8** | $8,829.0 Section 103 grants<br>$4,000.0 Section 105 grants<br>**Total: $12,829.0** | $8,769.0 Section 103 grants<br>$3,973.0 Section 105 grants<br>**Total: $12,742.0** | $6,163.0 Section 103 grants<br>$2,800.0 Section 105 grants<br>**Total: $8,963.0** |
| Radon | TSCA, Sections 10 and 306 | State Agencies, Tribes, Intertribal Consortia | Assist in the development and implementation of programs for the assessment and mitigation of radon. | N/A | $7,963.4 | $8,051.0 | $7,996.0 | $0.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Multipurpose Grants | P.L. 114-113, Annual Appropriations Act | State Agencies, Tribes | Implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws. | Goal 1<br>Obj. Multiple | $162.9 | $0.0 | $0.0 | $27,000.0 |
| Water Pollution Control (Section 106) | FWPCA, as amended, Section 106; TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia, Interstate Agencies | Develop and carry out surface and ground water pollution control programs, including NPDES permits, TMDLs, WQ standards, monitoring, and NPS control activities. | Goal 1,<br>Obj. 1.2 | $227,686.1 | $230,806.0 | $229,239.0 | $153,683.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Nonpoint Source (NPS – Section 319) | FWPCA, as amended, Section 319(h); TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia | Implement EPA-approved State and Tribal nonpoint source management programs and fund priority projects as selected by the state. | N/A | $169,771.6 | $170,915.0 | $169,754.0 | $0.0 |
| Wetlands Program Development | FWPCA, as amended, Section 104 (b)(3); TCA in annual Appropriations Acts. | States, Local Governments, Tribes, Interstate Organizations, Intertribal Consortia, Non-Profit Organizations | To develop new wetland programs or enhance existing programs for the protection, management, and restoration of wetland resources. | Goal 1, Obj. 1.2 | $15,867.0 | $14,661.0 | $14,561.0 | $9,762.0 |
| Gold King Mine – Water Monitoring | WIIN, Section 5004(d);Water Quality Program | States, Tribes, and Local Governments | Water quality monitoring of rivers contaminated by the Gold King Mine release. | N/A | $105.5 | $4,000.0 | $3,973.0 | $0.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Public Water System Supervision (PWSS) | SDWA, Section 1443(a); TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia | Assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health. | Goal 1, Obj. 1.2 | $101,125.8 | $101,963.0 | $101,271.0 | $67,892.0 |
| Underground Injection Control (UIC) | SDWA, Section 1443(b); TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia | Implement and enforce regulations that protect underground sources of drinking water by controlling Class I-V underground injection wells. | Goal 1, Obj. 1.2 | $10,572.3 | $10,506.0 | $10,435.0 | $6,995.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Beaches Protection | BEACH Act of 2000; TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia, Local Governments | Develop and implement programs for monitoring and notification of conditions for coastal recreation waters adjacent to beaches or similar points of access that are used by the public. | N/A | $9,540.3 | $9,549.0 | $9,484.0 | $0.0 |
| Hazardous Waste Financial Assistance | RCRA, Section 3011; FY 1999 Appropriations Act (P.L. 105-276); TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia | Development & Implementation of Hazardous Waste Programs | Goal 1, Obj. 1.3 | $97,165.0 | $99,693.0 | $99,016.0 | $66,381.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Brownfields | CERCLA, as amended by the Small Business Liability Relief and Brownfields Revitalization Act, Section 128(a) (42 U.S.C. 9628); GMRA (1990)a; FGCAA. | States, Tribes, Intertribal Consortia | Establish and enhance state and tribal response programs which will timely survey and inventory brownfields sites; develop oversight and enforcement authorities to ensure response actions are protective of human health and the environment; develop ways for communities to provide meaningful opportunities for public participation; and develop mechanisms for approval of a cleanup plan and verification and certification that cleanup is complete. | Goal 1, Obj. 1.3 | $46,994.9 | $47,745.0 | $47,421.0 | $31,791.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Underground Storage Tanks (UST) | SWDA, Section 2007(f), 42 U.S.C. 6916(f)(2); EPAct of 2005, Title XV – Ethanol and Motor Fuels, Subtitle B – Underground Storage Tank Compliance, Sections 1521-1533, P.L. 109-58, 42 U.S.C. 15801. | States | Provide funding for States' underground storage tanks and to support direct UST implementation programs. | N/A | $1,479.4 | $1,498.0 | $1,488.0 | $0.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Pesticides Program Implementation | FIFRA, Sections 20 and 23; the FY 1999 Appropriations Act (P.L. 105-276); FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia | Implement the following programs through grants to States, Tribes, partners, and supporters for implementation of pesticide programs, including:<br>Certification and Training (C&T),Worker Protection; Endangered Species Protection Program (ESPP) Field Activities; Pesticides in Water; and Tribal Programs. | Goal 1,<br>Obj. 1.4 | $12,012.4<br>– States formula<br>_____<br>$390.0<br>HQ Programs:<br>- Tribal<br>- PREP<br>- School IPM<br>_____<br>**Total: $12,402.4** | $11,423.0<br>– States formula<br>_____<br>$1,278.0<br>HQ Programs:<br>- Tribal<br>- PREP<br>- School IPM<br>_____<br>**Total: $12,701.0** | $11,346.0<br>– States formula<br>_____<br>$1,269.0<br>HQ Programs:<br>- Tribal<br>- PREP<br>- Pollinator Protection<br>_____<br>**Total: $12,615.0** | $7,350.0<br>– States formula<br>_____<br>$1,107.0<br>HQ Programs:<br>- Tribal<br>- PREP<br>- Pollinator Protection<br>_____<br>**Total: $8,457.0** |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Lead | TSCA, Section 404 (g); FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia | Provide assistance to states, territories, the District of Columbia, and tribes to develop and implement authorized lead-based paint abatement programs and authorized Renovation, Repair, and Painting (RRP) programs. The EPA directly implements these programs in all areas of the country that are not authorized to do so, and will continue to operate the Federal Lead-based Paint Program Database (FLPP) of trained and certified lead-based paint professionals. | N/A | $12,265.6<br>404(g) State/ Tribal Certification<br>_____<br>$2,556.6<br>404(g) Direct Implementation<br>**Total:**<br>**$14,822.2** | $12,372.0<br>404(g) State/ Tribal Certification<br>_____<br>$1,677.0<br>404(g) Direct Implementation<br>**Total:**<br>**$14,049.0** | $12,287.0<br>404(g) State/ Tribal Certification<br>_____<br>$1,667.0<br>404(g) Direct Implementation<br>**Total:**<br>**$13,954.0** | $0.0<br>404(g) State/ Tribal Certification<br>_____<br>$0.0<br>404(g) Direct Implementation<br>**Total:**<br>**$0.0** |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Toxic Substances Compliance | TSCA, Sections 28(a) and 404 (g); TCA in annual Appropriations Acts. | States, federally recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S. | Assist in developing, maintaining, and implementing compliance monitoring programs for PCBs, asbestos, and Lead Based Paint. In addition, enforcement actions by: 1) the Lead Based Paint program and 2) States that obtained a "waiver" under the Asbestos program. | Goal 2, Obj. 2.1 | $4,938.3 | $4,919.0 | $4,886.0 | $3,276.0 |
| Pesticide Enforcement | FIFRA § 23(a)(1); FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts. | States, Federally recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S. | Assist with implementation of cooperative pesticide enforcement programs. | Goal 2, Obj. 2.1 | $17,687.1 | $18,050.0 | $17,927.0 | $10,531.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| National Environmental Information Exchange Network (NEIEN, aka "the Exchange Network") | Consolidated Appropriations Act 2016; P.L.114-113 EPA Annual appropriations;<br>Paperwork Reduction Act Section 3520.<br>The E-Government Act of 2002 (Pub.L. 107–347, 116 Stat. 2899, 44 U.S.C. § 101, H.R. 2458/S. 803)<br>As appropriate, CAA, Section 103; CWA, Section 104; RCRA, Section 8001; FIFRA, Section 20; TSCA, Sections 10 and 28; MPRSA, Section 203; SDWA, Section 1442; Indian Environmental General Assistance Program Act of 1992, as amended; Pollution Prevention Act of 1990, Section 6605 | States, U.S. Territories, Federally Recognized Tribes and Native Villages, Interstate Agencies, Tribal Consortia, Other Agencies with Related Environmental Information Activities. | Helps States, U.S. Territories, Tribes, and intertribal consortia develop the information management and technology (IM/IT) capabilities they need to participate in the Exchange Network, to continue and expand data-sharing programs, and to improve access to environmental information. | Goal 3,<br>Obj. 3.4 | $9,289.3 | $9,646.0 | $9,580.0 | $6,422.0 |

| Grant Title | Statutory Authorities | Eligible Recipients | Eligible Uses | FY 2019 Goal/Objective | FY 2017 Actual Dollars (X1000) | FY 2017 Enacted Dollars[3] (X1000) | FY 2018 Annualized CR Dollars (X1000) | FY 2019 President's Request (X1000) |
|---|---|---|---|---|---|---|---|---|
| Pollution Prevention | Pollution Prevention Act of 1990, Section 6605; TSCA Section 10; FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts. | States, Tribes, Intertribal Consortia | Provides assistance to States and State entities (i.e., colleges and universities) and Federally-recognized Tribes and intertribal consortia to deliver pollution prevention technical assistance to small and medium-sized businesses. A goal of the program is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source. | N/A | $4,504.6 | $4,765.0 | $4,733.0 | $0.0 |
| Tribal General Assistance Program | Indian Environmental General Assistance Program Act (42 U.S.C. 4368b); TCA in annual Appropriations Acts. | Tribal Governments, Intertribal Consortia | Plan and develop Tribal environmental protection programs. | Goal 2, Obj. 2.1 | $68,186.0 | $65,476.0 | $65,031.0 | $44,233.0 |

# Environmental Protection Agency
# FY 2019 Annual Performance Plan and Congressional Justification

## Program Projects by Program Area
(Dollars in Thousands)

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Science & Technology** | | | | |
| **Clean Air** | | | | |
| Clean Air Allowance Trading Programs | $6,045.0 | $7,518.0 | $5,739.0 | -$1,779.0 |
| Atmospheric Protection Program | $7,050.8 | $7,964.0 | $0.0 | -$7,964.0 |
| Federal Support for Air Quality Management | $7,283.8 | $7,280.0 | $4,031.0 | -$3,249.0 |
| Federal Vehicle and Fuels Standards and Certification | $98,177.0 | $92,988.0 | $75,135.0 | -$17,853.0 |
| **Subtotal, Clean Air** | **$118,556.6** | **$115,750.0** | **$84,905.0** | **-$30,845.0** |
| **Indoor Air and Radiation** | | | | |
| Indoor Air: Radon Program | $145.0 | $158.0 | $0.0 | -$158.0 |
| Radiation: Protection | $2,328.6 | $1,996.0 | $1,000.0 | -$996.0 |
| Radiation: Response Preparedness | $3,785.0 | $3,658.0 | $3,666.0 | $8.0 |
| Reduce Risks from Indoor Air | $253.3 | $144.0 | $0.0 | -$144.0 |
| **Subtotal, Indoor Air and Radiation** | **$6,511.9** | **$5,956.0** | **$4,666.0** | **-$1,290.0** |
| **Enforcement** | | | | |
| Forensics Support | $13,228.8 | $13,576.0 | $10,486.0 | -$3,090.0 |
| **Homeland Security** | | | | |
| Homeland Security: Critical Infrastructure Protection | $9,950.4 | $9,153.0 | $5,216.0 | -$3,937.0 |
| Homeland Security: Preparedness, Response, and Recovery | $23,161.0 | $23,298.0 | $22,461.0 | -$837.0 |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $438.0 | $446.0 | $500.0 | $54.0 |
| **Subtotal, Homeland Security** | **$33,549.4** | **$32,897.0** | **$28,177.0** | **-$4,720.0** |
| **IT / Data Management / Security** | | | | |
| IT / Data Management | $3,342.0 | $3,068.0 | $2,725.0 | -$343.0 |
| **Operations and Administration** | | | | |
| Facilities Infrastructure and Operations | $64,642.7 | $67,875.0 | $68,834.0 | $959.0 |
| Workforce Reshaping | $0.0 | $0.0 | $5,994.0 | $5,994.0 |
| **Subtotal, Operations and Administration** | **$64,642.7** | **$67,875.0** | **$74,828.0** | **$6,953.0** |
| **Pesticides Licensing** | | | | |
| Pesticides: Protect Human Health from Pesticide Risk | $2,938.3 | $3,090.0 | $2,406.0 | -$684.0 |
| Pesticides: Protect the Environment from Pesticide Risk | $2,046.2 | $2,325.0 | $2,122.0 | -$203.0 |
| Pesticides: Realize the Value of Pesticide Availability | $548.1 | $571.0 | $530.0 | -$41.0 |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Subtotal, Pesticides Licensing** | **$5,532.6** | **$5,986.0** | **$5,058.0** | **-$928.0** |
| **Research: Air and Energy** | | | | |
| Research: Air and Energy | $90,076.2 | $91,282.0 | $30,711.0 | -$60,571.0 |
| **Research: Safe and Sustainable Water Resources** | | | | |
| Research: Safe and Sustainable Water Resources | $104,687.6 | $105,535.0 | $67,261.0 | -$38,274.0 |
| **Research: Sustainable Communities** | | | | |
| Research: Sustainable and Healthy Communities | $142,429.1 | $133,415.0 | $52,549.0 | -$80,866.0 |
| **Research: Chemical Safety and Sustainability** | | | | |
| Human Health Risk Assessment | $40,506.5 | $37,554.0 | $22,267.0 | -$15,287.0 |
| Research: Chemical Safety and Sustainability | | | | |
| *Endocrine Disruptors* | $15,497.0 | $16,142.0 | $10,006.0 | -$6,136.0 |
| *Computational Toxicology* | $21,790.5 | $21,266.0 | $17,213.0 | -$4,053.0 |
| *Research: Chemical Safety and Sustainability (other activities)* | $51,905.1 | $51,106.0 | $34,518.0 | -$16,588.0 |
| Subtotal, Research: Chemical Safety and Sustainability | $89,192.6 | $88,514.0 | $61,737.0 | -$26,777.0 |
| **Subtotal, Research: Chemical Safety and Sustainability** | **$129,699.1** | **$126,068.0** | **$84,004.0** | **-$42,064.0** |
| **Water: Human Health Protection** | | | | |
| Drinking Water Programs | $3,517.0 | $3,495.0 | $3,595.0 | $100.0 |
| **Congressional Priorities** | | | | |
| Water Quality Research and Support Grants | $7,803.4 | $4,072.0 | $0.0 | -$4,072.0 |
| **Total, Science & Technology** | **$723,576.4** | **$708,975.0** | **$448,965.0** | **-$260,010.0** |
| **Environmental Program & Management** | | | | |
| **Clean Air** | | | | |
| Clean Air Allowance Trading Programs | $15,236.6 | $16,060.0 | $12,574.0 | -$3,486.0 |
| Atmospheric Protection Program | $89,143.7 | $94,788.0 | $13,542.0 | -$81,246.0 |
| Federal Stationary Source Regulations | $20,282.9 | $21,736.0 | $16,898.0 | -$4,838.0 |
| Federal Support for Air Quality Management | $127,113.4 | $125,387.0 | $96,097.0 | -$29,290.0 |
| Stratospheric Ozone: Domestic Programs | $4,709.1 | $4,606.0 | $3,790.0 | -$816.0 |
| Stratospheric Ozone: Multilateral Fund | $8,326.0 | $8,677.0 | $0.0 | -$8,677.0 |
| **Subtotal, Clean Air** | **$264,811.7** | **$271,254.0** | **$142,901.0** | **-$128,353.0** |
| **Indoor Air and Radiation** | | | | |
| Indoor Air: Radon Program | $2,985.9 | $3,115.0 | $0.0 | -$3,115.0 |
| Radiation: Protection | $7,780.1 | $8,519.0 | $2,000.0 | -$6,519.0 |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Radiation: Response Preparedness | $2,543.1 | $2,573.0 | $2,221.0 | -$352.0 |
| Reduce Risks from Indoor Air | $13,389.1 | $13,242.0 | $0.0 | -$13,242.0 |
| **Subtotal, Indoor Air and Radiation** | **$26,698.2** | **$27,449.0** | **$4,221.0** | **-$23,228.0** |
| **Brownfields** | | | | |
| Brownfields | $25,411.8 | $25,419.0 | $16,082.0 | -$9,337.0 |
| **Compliance** | | | | |
| Compliance Monitoring | $98,283.6 | $100,975.0 | $86,374.0 | -$14,601.0 |
| **Enforcement** | | | | |
| Civil Enforcement | $172,309.6 | $170,849.0 | $140,677.0 | -$30,172.0 |
| Criminal Enforcement | $48,039.2 | $45,333.0 | $41,107.0 | -$4,226.0 |
| Environmental Justice | $6,401.5 | $6,691.0 | $2,000.0 | -$4,691.0 |
| NEPA Implementation | $16,098.2 | $16,130.0 | $13,496.0 | -$2,634.0 |
| **Subtotal, Enforcement** | **$242,848.5** | **$239,003.0** | **$197,280.0** | **-$41,723.0** |
| **Geographic Programs** | | | | |
| Geographic Program: Chesapeake Bay | $66,773.5 | $72,504.0 | $7,300.0 | -$65,204.0 |
| Geographic Program: Gulf of Mexico | $3,395.8 | $8,484.0 | $0.0 | -$8,484.0 |
| Geographic Program: Lake Champlain | $4,395.0 | $4,369.0 | $0.0 | -$4,369.0 |
| Geographic Program: Long Island Sound | $7,989.8 | $7,946.0 | $0.0 | -$7,946.0 |
| Geographic Program: Other | | | | |
| *Lake Pontchartrain* | $0.0 | $942.0 | $0.0 | -$942.0 |
| *S.New England Estuary (SNEE)* | $5,020.0 | $4,965.0 | $0.0 | -$4,965.0 |
| *Geographic Program: Other (other activities)* | $1,374.7 | $1,436.0 | $0.0 | -$1,436.0 |
| Subtotal, Geographic Program: Other | $6,394.7 | $7,343.0 | $0.0 | -$7,343.0 |
| Great Lakes Restoration | $353,207.0 | $297,963.0 | $30,000.0 | -$267,963.0 |
| Geographic Program: South Florida | $1,624.0 | $1,692.0 | $0.0 | -$1,692.0 |
| Geographic Program: San Francisco Bay | $4,493.7 | $4,786.0 | $0.0 | -$4,786.0 |
| Geographic Program: Puget Sound | $27,971.9 | $27,810.0 | $0.0 | -$27,810.0 |
| **Subtotal, Geographic Programs** | **$476,245.4** | **$432,897.0** | **$37,300.0** | **-$395,597.0** |
| **Homeland Security** | | | | |
| Homeland Security: Communication and Information | $3,480.0 | $3,834.0 | $3,511.0 | -$323.0 |
| Homeland Security: Critical Infrastructure Protection | $936.9 | $956.0 | $1,263.0 | $307.0 |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $4,918.0 | $5,336.0 | $4,986.0 | -$350.0 |
| **Subtotal, Homeland Security** | **$9,334.9** | **$10,126.0** | **$9,760.0** | **-$366.0** |
| **Information Exchange / Outreach** | | | | |
| State and Local Prevention and Preparedness | $14,413.1 | $15,269.0 | $10,031.0 | -$5,238.0 |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| TRI / Right to Know | $12,556.8 | $14,187.0 | $7,726.0 | -$6,461.0 |
| Tribal - Capacity Building | $14,760.7 | $14,448.0 | $12,631.0 | -$1,817.0 |
| Executive Management and Operations | $47,207.3 | $46,398.0 | $39,431.0 | -$6,967.0 |
| Environmental Education | $8,930.9 | $8,643.0 | $0.0 | -$8,643.0 |
| Exchange Network | $16,483.8 | $16,578.0 | $11,784.0 | -$4,794.0 |
| Small Minority Business Assistance | $1,704.6 | $1,573.0 | $0.0 | -$1,573.0 |
| Small Business Ombudsman | $2,102.2 | $2,080.0 | $1,965.0 | -$115.0 |
| Children and Other Sensitive Populations: Agency Coordination | $6,294.6 | $6,504.0 | $2,018.0 | -$4,486.0 |
| **Subtotal, Information Exchange / Outreach** | **$124,454.0** | **$125,680.0** | **$85,586.0** | **-$40,094.0** |
| **International Programs** | | | | |
| US Mexico Border | $2,864.8 | $3,012.0 | $0.0 | -$3,012.0 |
| International Sources of Pollution | $6,338.3 | $6,506.0 | $4,188.0 | -$2,318.0 |
| Trade and Governance | $5,857.8 | $5,777.0 | $0.0 | -$5,777.0 |
| **Subtotal, International Programs** | **$15,060.9** | **$15,295.0** | **$4,188.0** | **-$11,107.0** |
| **IT / Data Management / Security** | | | | |
| Information Security | $9,166.5 | $6,742.0 | $13,755.0 | $7,013.0 |
| IT / Data Management | $82,580.0 | $83,179.0 | $69,264.0 | -$13,915.0 |
| **Subtotal, IT / Data Management / Security** | **$91,746.5** | **$89,921.0** | **$83,019.0** | **-$6,902.0** |
| **Legal / Science / Regulatory / Economic Review** | | | | |
| Integrated Environmental Strategies | $10,732.3 | $10,581.0 | $9,496.0 | -$1,085.0 |
| Administrative Law | $4,533.9 | $4,381.0 | $4,557.0 | $176.0 |
| Alternative Dispute Resolution | $1,142.0 | $1,015.0 | $0.0 | -$1,015.0 |
| Civil Rights Program | $10,101.9 | $9,699.0 | $8,545.0 | -$1,154.0 |
| Legal Advice: Environmental Program | $52,889.7 | $49,657.0 | $42,292.0 | -$7,365.0 |
| Legal Advice: Support Program | $14,489.7 | $15,170.0 | $16,451.0 | $1,281.0 |
| Regional Science and Technology | $1,398.2 | $1,406.0 | $0.0 | -$1,406.0 |
| Science Advisory Board | $3,820.3 | $3,736.0 | $3,779.0 | $43.0 |
| Regulatory/Economic-Management and Analysis | $15,498.4 | $15,011.0 | $15,532.0 | $521.0 |
| **Subtotal, Legal / Science / Regulatory / Economic Review** | **$114,606.4** | **$110,656.0** | **$100,652.0** | **-$10,004.0** |
| **Operations and Administration** | | | | |
| Central Planning, Budgeting, and Finance | $73,003.2 | $71,493.0 | $68,635.0 | -$2,858.0 |
| Facilities Infrastructure and Operations | $293,997.9 | $305,844.0 | $300,738.0 | -$5,106.0 |
| Acquisition Management | $31,042.0 | $30,803.0 | $25,438.0 | -$5,365.0 |
| Human Resources Management | $50,608.8 | $43,930.0 | $40,860.0 | -$3,070.0 |
| Financial Assistance Grants / IAG Management | $24,444.8 | $25,416.0 | $18,986.0 | -$6,430.0 |
| Workforce Reshaping | $0.0 | $0.0 | $25,549.0 | $25,549.0 |
| **Subtotal, Operations and Administration** | **$473,096.7** | **$477,486.0** | **$480,206.0** | **$2,720.0** |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Pesticides Licensing** | | | | |
| Science Policy and Biotechnology | $1,210.0 | $1,479.0 | $0.0 | -$1,479.0 |
| Pesticides: Protect Human Health from Pesticide Risk | $56,911.0 | $55,696.0 | $45,949.0 | -$9,747.0 |
| Pesticides: Protect the Environment from Pesticide Risk | $36,654.9 | $38,302.0 | $28,727.0 | -$9,575.0 |
| Pesticides: Realize the Value of Pesticide Availability | $5,554.3 | $6,191.0 | $5,084.0 | -$1,107.0 |
| **Subtotal, Pesticides Licensing** | **$100,330.2** | **$101,668.0** | **$79,760.0** | **-$21,908.0** |
| **Resource Conservation and Recovery Act (RCRA)** | | | | |
| RCRA: Corrective Action | $36,129.6 | $36,584.0 | $31,944.0 | -$4,640.0 |
| RCRA: Waste Management | $58,277.0 | $58,439.0 | $41,907.0 | -$16,532.0 |
| RCRA: Waste Minimization & Recycling | $9,254.1 | $9,141.0 | $0.0 | -$9,141.0 |
| **Subtotal, Resource Conservation and Recovery Act (RCRA)** | **$103,660.7** | **$104,164.0** | **$73,851.0** | **-$30,313.0** |
| **Toxics Risk Review and Prevention** | | | | |
| Endocrine Disruptors | $6,006.4 | $7,502.0 | $0.0 | -$7,502.0 |
| Pollution Prevention Program | $11,338.1 | $12,194.0 | $0.0 | -$12,194.0 |
| Toxic Substances: Chemical Risk Review and Reduction | $64,329.5 | $58,995.0 | $58,626.0 | -$369.0 |
| Toxic Substances: Lead Risk Reduction Program | $12,780.9 | $13,203.0 | $0.0 | -$13,203.0 |
| **Subtotal, Toxics Risk Review and Prevention** | **$94,454.9** | **$91,894.0** | **$58,626.0** | **-$33,268.0** |
| **Underground Storage Tanks (LUST / UST)** | | | | |
| LUST / UST | $10,654.3 | $11,218.0 | $5,615.0 | -$5,603.0 |
| **Water: Ecosystems** | | | | |
| National Estuary Program / Coastal Waterways | $26,759.1 | $26,542.0 | $0.0 | -$26,542.0 |
| Wetlands | $20,448.7 | $20,922.0 | $17,913.0 | -$3,009.0 |
| **Subtotal, Water: Ecosystems** | **$47,207.8** | **$47,464.0** | **$17,913.0** | **-$29,551.0** |
| **Water: Human Health Protection** | | | | |
| Beach / Fish Programs | $1,364.0 | $1,638.0 | $0.0 | -$1,638.0 |
| Drinking Water Programs | $95,917.2 | $96,200.0 | $80,543.0 | -$15,657.0 |
| **Subtotal, Water: Human Health Protection** | **$97,281.2** | **$97,838.0** | **$80,543.0** | **-$17,295.0** |
| **Water Quality Protection** | | | | |
| Marine Pollution | $11,694.4 | $10,102.0 | $0.0 | -$10,102.0 |
| Surface Water Protection | $198,589.4 | $198,886.0 | $174,975.0 | -$23,911.0 |
| **Subtotal, Water Quality Protection** | **$210,283.8** | **$208,988.0** | **$174,975.0** | **-$34,013.0** |
| **Congressional Priorities** | | | | |
| Water Quality Research and Support Grants | $12,688.0 | $12,614.0 | $0.0 | -$12,614.0 |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Total, Environmental Program & Management** | **$2,639,159.5** | **$2,602,009.0** | **$1,738,852.0** | **-$863,157.0** |
| **Inspector General** | | | | |
| **Audits, Evaluations, and Investigations** | | | | |
| Audits, Evaluations, and Investigations | $41,053.7 | $41,207.0 | $37,475.0 | -$3,732.0 |
| **Total, Inspector General** | **$41,053.7** | **$41,207.0** | **$37,475.0** | **-$3,732.0** |
| **Building and Facilities** | | | | |
| **Homeland Security** | | | | |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $6,119.2 | $6,631.0 | $6,176.0 | -$455.0 |
| **Operations and Administration** | | | | |
| Facilities Infrastructure and Operations | $26,065.5 | $27,602.0 | $33,377.0 | $5,775.0 |
| **Total, Building and Facilities** | **$32,184.7** | **$34,233.0** | **$39,553.0** | **$5,320.0** |
| **Hazardous Substance Superfund** | | | | |
| **Indoor Air and Radiation** | | | | |
| Radiation: Protection | $1,833.6 | $1,972.0 | $1,972.0 | $0.0 |
| **Audits, Evaluations, and Investigations** | | | | |
| Audits, Evaluations, and Investigations | $9,156.4 | $8,718.0 | $8,718.0 | $0.0 |
| **Compliance** | | | | |
| Compliance Monitoring | $1,028.8 | $988.0 | $988.0 | $0.0 |
| **Enforcement** | | | | |
| Criminal Enforcement | $6,815.3 | $7,135.0 | $7,135.0 | $0.0 |
| Environmental Justice | $732.9 | $554.0 | $0.0 | -$554.0 |
| Forensics Support | $1,543.6 | $1,097.0 | $1,097.0 | $0.0 |
| Superfund: Enforcement | $153,706.0 | $150,466.0 | $150,466.0 | $0.0 |
| Superfund: Federal Facilities Enforcement | $5,594.9 | $5,993.0 | $5,993.0 | $0.0 |
| **Subtotal, Enforcement** | **$168,392.7** | **$165,245.0** | **$164,691.0** | **-$554.0** |
| **Homeland Security** | | | | |
| Homeland Security: Preparedness, Response, and Recovery | $33,899.4 | $31,461.0 | $31,752.0 | $291.0 |
| Homeland Security: Protection of EPA Personnel and Infrastructure | $1,306.2 | $934.0 | $934.0 | $0.0 |
| **Subtotal, Homeland Security** | **$35,205.6** | **$32,395.0** | **$32,686.0** | **$291.0** |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Information Exchange / Outreach** | | | | |
| Exchange Network | $1,316.3 | $1,319.0 | $1,319.0 | $0.0 |
| **IT / Data Management / Security** | | | | |
| Information Security | $654.9 | $666.0 | $5,186.0 | $4,520.0 |
| IT / Data Management | $14,691.5 | $13,720.0 | $13,720.0 | $0.0 |
| **Subtotal, IT / Data Management / Security** | **$15,346.4** | **$14,386.0** | **$18,906.0** | **$4,520.0** |
| **Legal / Science / Regulatory / Economic Review** | | | | |
| Alternative Dispute Resolution | $591.3 | $667.0 | $0.0 | -$667.0 |
| Legal Advice: Environmental Program | $691.2 | $577.0 | $577.0 | $0.0 |
| **Subtotal, Legal / Science / Regulatory / Economic Review** | **$1,282.5** | **$1,244.0** | **$577.0** | **-$667.0** |
| **Operations and Administration** | | | | |
| Central Planning, Budgeting, and Finance | $22,511.4 | $21,345.0 | $21,152.0 | -$193.0 |
| Facilities Infrastructure and Operations | $69,651.3 | $75,985.0 | $74,144.0 | -$1,841.0 |
| Acquisition Management | $22,103.1 | $21,296.0 | $21,296.0 | $0.0 |
| Human Resources Management | $5,380.1 | $5,997.0 | $5,497.0 | -$500.0 |
| Financial Assistance Grants / IAG Management | $2,997.4 | $2,611.0 | $2,611.0 | $0.0 |
| **Subtotal, Operations and Administration** | **$122,643.3** | **$127,234.0** | **$124,700.0** | **-$2,534.0** |
| **Research: Sustainable Communities** | | | | |
| Research: Sustainable and Healthy Communities | $12,717.6 | $11,385.0 | $10,885.0 | -$500.0 |
| **Research: Chemical Safety and Sustainability** | | | | |
| Human Health Risk Assessment | $3,020.5 | $2,805.0 | $5,021.0 | $2,216.0 |
| **Superfund Cleanup** | | | | |
| Superfund: Emergency Response and Removal | $198,324.0 | $180,075.0 | $181,306.0 | $1,231.0 |
| Superfund: EPA Emergency Preparedness | $7,174.6 | $7,584.0 | $7,584.0 | $0.0 |
| Superfund: Federal Facilities | $22,434.2 | $20,982.0 | $20,982.0 | $0.0 |
| Superfund: Remedial | $544,822.9 | $505,042.0 | $508,495.0 | $3,453.0 |
| **Subtotal, Superfund Cleanup** | **$772,755.7** | **$713,683.0** | **$718,367.0** | **$4,684.0** |
| **Total, Hazardous Substance Superfund** | **$1,144,699.4** | **$1,081,374.0** | **$1,088,830.0** | **$7,456.0** |
| **Leaking Underground Storage Tanks** | | | | |
| **Enforcement** | | | | |
| Civil Enforcement | $584.7 | $616.0 | $589.0 | -$27.0 |
| **Operations and Administration** | | | | |
| Central Planning, Budgeting, and Finance | $373.2 | $404.0 | $420.0 | $16.0 |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| Facilities Infrastructure and Operations | $502.2 | $793.0 | $773.0 | -$20.0 |
| Acquisition Management | $144.7 | $146.0 | $138.0 | -$8.0 |
| **Subtotal, Operations and Administration** | **$1,020.1** | **$1,343.0** | **$1,331.0** | **-$12.0** |
| **Underground Storage Tanks (LUST / UST)** | | | | |
| LUST / UST | $9,554.5 | $9,177.0 | $6,452.0 | -$2,725.0 |
| LUST Cooperative Agreements | $55,320.2 | $54,666.0 | $38,840.0 | -$15,826.0 |
| LUST Prevention | $25,305.9 | $25,197.0 | $0.0 | -$25,197.0 |
| **Subtotal, Underground Storage Tanks (LUST / UST)** | **$90,180.6** | **$89,040.0** | **$45,292.0** | **-$43,748.0** |
| **Research: Sustainable Communities** | | | | |
| Research: Sustainable and Healthy Communities | $358.0 | $318.0 | $320.0 | $2.0 |
| **Total, Leaking Underground Storage Tanks** | **$92,143.4** | **$91,317.0** | **$47,532.0** | **-$43,785.0** |
| **Inland Oil Spill Programs** | | | | |
| **Compliance** | | | | |
| Compliance Monitoring | $145.2 | $138.0 | $0.0 | -$138.0 |
| **Enforcement** | | | | |
| Civil Enforcement | $2,342.8 | $2,397.0 | $2,219.0 | -$178.0 |
| **Oil** | | | | |
| Oil Spill: Prevention, Preparedness and Response | $14,422.5 | $14,311.0 | $12,273.0 | -$2,038.0 |
| **Operations and Administration** | | | | |
| Facilities Infrastructure and Operations | $376.2 | $580.0 | $665.0 | $85.0 |
| **Research: Sustainable Communities** | | | | |
| Research: Sustainable and Healthy Communities | $653.4 | $659.0 | $516.0 | -$143.0 |
| **Total, Inland Oil Spill Programs** | **$17,940.1** | **$18,085.0** | **$15,673.0** | **-$2,412.0** |
| **State and Tribal Assistance Grants** | | | | |
| **State and Tribal Assistance Grants (STAG)** | | | | |
| Infrastructure Assistance: Alaska Native Villages | $20,083.7 | $19,864.0 | $3,000.0 | -$16,864.0 |
| Brownfields Projects | $88,370.2 | $79,457.0 | $62,000.0 | -$17,457.0 |
| Infrastructure Assistance: Clean Water SRF | $1,380,738.8 | $1,384,421.0 | $1,393,887.0 | $9,466.0 |
| Infrastructure Assistance: Drinking Water SRF | $944,392.1 | $857,371.0 | $863,233.0 | $5,862.0 |
| Infrastructure Assistance: Mexico Border | $10,628.2 | $9,932.0 | $0.0 | -$9,932.0 |
| Diesel Emissions Reduction Grant Program | $40,683.0 | $59,593.0 | $10,000.0 | -$49,593.0 |
| Targeted Airshed Grants | $19,818.1 | $29,796.0 | $0.0 | -$29,796.0 |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| GKM Water Monitoring | $105.5 | $3,973.0 | $0.0 | -$3,973.0 |
| **Subtotal, State and Tribal Assistance Grants (STAG)** | **$2,504,819.6** | **$2,444,407.0** | **$2,332,120.0** | **-$112,287.0** |
| **Categorical Grants** | | | | |
| Categorical Grant: Nonpoint Source (Sec. 319) | $169,771.6 | $169,754.0 | $0.0 | -$169,754.0 |
| Categorical Grant: Public Water System Supervision (PWSS) | $101,125.8 | $101,271.0 | $67,892.0 | -$33,379.0 |
| Categorical Grant: State and Local Air Quality Management | $214,180.6 | $226,669.0 | $151,961.0 | -$74,708.0 |
| Categorical Grant: Radon | $7,963.4 | $7,996.0 | $0.0 | -$7,996.0 |
| Categorical Grant: Pollution Control (Sec. 106) | | | | |
| *Monitoring Grants* | $18,392.0 | $17,727.0 | $11,884.0 | -$5,843.0 |
| *Categorical Grant: Pollution Control (Sec. 106) (other activities)* | $209,294.1 | $211,512.0 | $141,799.0 | -$69,713.0 |
| Subtotal, Categorical Grant: Pollution Control (Sec. 106) | $227,686.1 | $229,239.0 | $153,683.0 | -$75,556.0 |
| Categorical Grant: Wetlands Program Development | $15,867.0 | $14,561.0 | $9,762.0 | -$4,799.0 |
| Categorical Grant: Underground Injection Control (UIC) | $10,572.3 | $10,435.0 | $6,995.0 | -$3,440.0 |
| Categorical Grant: Pesticides Program Implementation | $12,402.4 | $12,615.0 | $8,457.0 | -$4,158.0 |
| Categorical Grant: Lead | $14,822.2 | $13,954.0 | $0.0 | -$13,954.0 |
| Categorical Grant: Hazardous Waste Financial Assistance | $97,165.0 | $99,016.0 | $66,381.0 | -$32,635.0 |
| Categorical Grant: Pesticides Enforcement | $17,687.1 | $17,927.0 | $10,531.0 | -$7,396.0 |
| Categorical Grant: Pollution Prevention | $4,504.6 | $4,733.0 | $0.0 | -$4,733.0 |
| Categorical Grant: Toxics Substances Compliance | $4,938.3 | $4,886.0 | $3,276.0 | -$1,610.0 |
| Categorical Grant: Tribal General Assistance Program | $68,186.0 | $65,031.0 | $44,233.0 | -$20,798.0 |
| Categorical Grant: Underground Storage Tanks | $1,479.4 | $1,488.0 | $0.0 | -$1,488.0 |
| Categorical Grant: Tribal Air Quality Management | $14,027.8 | $12,742.0 | $8,963.0 | -$3,779.0 |
| Categorical Grant: Environmental Information | $9,289.3 | $9,580.0 | $6,422.0 | -$3,158.0 |
| Categorical Grant: Beaches Protection | $9,540.3 | $9,484.0 | $0.0 | -$9,484.0 |
| Categorical Grant: Brownfields | $46,994.9 | $47,421.0 | $31,791.0 | -$15,630.0 |
| Categorical Grant: Multipurpose Grants | $162.9 | $0.0 | $27,000.0 | $27,000.0 |
| **Subtotal, Categorical Grants** | **$1,048,367.0** | **$1,058,802.0** | **$597,347.0** | **-$461,455.0** |
| **Congressional Priorities** | | | | |
| Congressionally Mandated Projects | $4,565.8 | $0.0 | $0.0 | $0.0 |
| **Total, State and Tribal Assistance Grants** | **$3,557,752.4** | **$3,503,209.0** | **$2,929,467.0** | **-$573,742.0** |
| **Hazardous Waste Electronic Manifest System Fund** | | | | |
| **Resource Conservation and Recovery Act (RCRA)** | | | | |
| RCRA: Waste Management | $4,915.4 | $3,156.0 | $0.0 | -$3,156.0 |

| | FY 2017 Actuals | FY 2018 Annualized CR | FY 2019 Pres Budget | FY 2019 Pres Budget v. FY 2018 Annualized CR |
|---|---|---|---|---|
| **Total, Hazardous Waste Electronic Manifest System Fund** | **$4,915.4** | **$3,156.0** | **$0.0** | **-$3,156.0** |
| **Water Infrastructure Finance and Innovation Fund** | | | | |
| **Water Quality Protection** | | | | |
| Water Infrastructure Finance and Innovation[4] | $3,597.7 | $12,932.0 | $20,000.0 | $7,068.0 |
| **Total, Water Infrastructure Finance and Innovation Fund** | **$3,597.7** | **$12,932.0** | **$20,000.0** | **$7,068.0** |
| **Subtotal, EPA** | **$8,257,022.7** | **$8,096,497.0** | **$6,366,347.0** | **-$1,730,150.0** |
| Cancellation of Funds | $0.0 | -$90,348.0 | -$220,460.0 | -$130,112.0 |
| **TOTAL, EPA** | **$8,257,022.7** | **$8,006,149.0** | **$6,145,887.0** | **-$1,860,262.0** |

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

[4] The FY 2017 Appropriations Act (P.L. 115-31) provided the WIFIA program with $10 million; this funding supplemented $20 million previously provided in FY 2017 by a Continuing Resolution (P.L. 114-254).

## Eliminated Programs

### Eliminated Program Projects

**Alternative Dispute Resolution** (FY 2018 Annualized CR: $1.682 M, 6.7 FTE)
This program provides alternative dispute resolution (ADR) services to EPA Headquarters, EPA Regional Offices, and external stakeholders. This elimination of funding reflects the centralization of conflict prevention and ADR program. Programs across the Agency may pursue ADR support services and training individually.

**Beach / Fish Programs** (FY 2018 Annualized CR: $1.638 M, 3.8 FTE)
This program provides science, guidance, technical assistance and nationwide information to state, Tribal, and federal agencies on the human health risks associated with eating locally caught fish/shellfish or wildlife with excessive levels of contaminants, as well as beach monitoring and notification programs. The Agency will encourage states to continue this work within ongoing core programs.

**Categorical Grant: Beaches Protection** (FY 2018 Annualized CR: $9.484 M, 0.0 FTE)
Grants authorized under the BEACH Act support continued development and implementation of coastal recreational water monitoring and public notification programs. After over 17 years of technical guidance and financial support, state and local governments now have the technical expertise and procedures to continue beach monitoring without federal support.

**Categorical Grant: Lead** (FY 2018 Annualized CR: $13.954 M, 0.0 FTE)
The program provides support to authorized state and tribal programs that administer training and certification programs for lead paint professionals and contractors. Lead paint certification will continue under the Chemical Risk Review Reduction program.

**Categorical Grant: Nonpoint Source (Sec. 319)** (FY 2018 Annualized CR: $169.754 M, 0.0 FTE)
This program provides grants to assist states and tribes in implementing approved elements of Nonpoint Source Programs including: regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects. The Agency will continue to coordinate with the United States Department of Agriculture to target funding where appropriate to address nonpoint sources.

**Categorical Grant: Pollution Prevention** (FY 2018 Annualized CR: $4.733 M, 0.0 FTE)
The Pollution Prevention (P2) program is a tool for advancing environmental stewardship by federal, state and tribal governments, businesses, communities and individuals. In FY 2019, EPA will focus its resources on core statutory environmental work.

**Categorical Grant: Radon** (FY 2018 Annualized CR: $7.996 M, 0.0 FTE)
The program provides funding for the development of state radon programs and disseminates public information and educational materials. The program also provides information on equipment training, data storage and management, and toll-free hotlines. For over 30 years EPA's radon program has provided important guidance and significant funding to help states establish

their own programs. States could elect to maintain core program work by using state resources rather than using federal resources.

**Categorical Grant: Underground Storage Tanks (**FY 2018 Annualized CR: $1.488 M, 0.0 FTE)
The program provides funding for petroleum and hazardous substance release prevention and detection activities including: compliance assistance, state program approvals, and technical equipment reviews and approvals. States could elect to maintain core program work with state resources rather than federal.

**Endocrine Disruptors** (FY 2018 Annualized CR: $7.502 M, 8.9 FTE)
The program develops and validates scientific test methods for the routine, ongoing evaluation of pesticides and other chemicals to determine their potential interference with normal endocrine system function. The program recently developed and validated some tier 1 and tier 2 testing approaches for endocrine disruption. The ongoing functions of the program will be absorbed into the pesticides program using the currently available tiered testing.

**Environmental Education (EE)** (FY 2018 Annualized CR: $8.643 M, 11.1 FTE)
This program promotes delivery of environmental education through science-based methodologies that promote public engagement. In recognition of the significant guidance and financial support the EE program has provided to non-profit organizations, local education agencies, universities, community colleges, and state and local environmental agencies, funding for some of the environmental stewardship activities could be leveraged at the state or local level.

**Geographic Program: Gulf of Mexico** (FY 2018 Annualized CR: $8.484 M, 14.3 FTE**)**
The program is a partnership of the five Gulf states, Gulf coastal communities, citizens, nongovernmental organizations, and federal agencies working together to initiate cooperative actions by public and private organizations to achieve specific environmental results. EPA will encourage the five Gulf of Mexico states to continue to make progress in restoring the Gulf of Mexico from within core water programs.

**Geographic Program: Lake Champlain** (FY 2018 Annualized CR: $4.369 M, 0.0 FTE)
The program creates a pollution prevention, control, and restoration plan for protecting the Lake Champlain Basin. EPA will encourage New York and Vermont to continue to make progress in restoring Lake Champlain from within core water programs.

**Geographic Program: Long Island Sound** (FY 2018 Annualized CR: $7.946 M, 0.0 FTE)
The program supports the implementation of the Comprehensive Conservation and Management Plan for the Long Island Sound National Estuary Program. EPA will encourage Long Island Sound states and local entities to continue to make progress in restoring the Sound from within core water programs.

**Geographic Program: Other** (FY 2018 Annualized CR: $7.343 M, 4.9 FTE)
The program provides funding to develop and implement community-based approaches to mitigate diffuse sources of pollution and cumulative risk for geographic areas including: Lake Pontchartrain, Southern New England Estuary (SNEE), and the Northwest Forest Program. EPA

will encourage states and local entities to continue to make progress in restoring these aquatic ecosystems from within core water programs.

**Geographic Program: Puget Sound** (FY 2018 Annualized CR: $27.810 M, 6.0 FTE)
The program works to protect and restore the Puget Sound, focusing on environmental activities consistent with the State of Washington's 2020 Puget Sound Action Agenda. EPA will encourage state, tribal, and local entities to continue to make progress in restoring the Puget Sound from within core water programs.

**Geographic Program: San Francisco Bay** (FY 2018 Annualized CR: $4.786 M, 1.9 FTE)
The program is aimed at protecting and restoring water quality and ecological health of the San Francisco Bay estuary through partnerships, interagency coordination, and project grants. EPA will encourage the state of California and local entities to continue to make progress in restoring the San Francisco Bay from within core water programs.

**Geographic Program: South Florida** (FY 2018 Annualized CR: $1.692 M, 1.4 FTE)
The program leads special initiatives and planning activities in the South Florida region, which includes the Everglades and Florida Keys coral reef ecosystem. EPA will encourage state, tribal, and local entities to continue to make progress in protecting and restoring sensitive aquatic ecosystems in South Florida from within core water programs.

**Gold King Mine Water Monitoring** (FY 2018 Annualized CR: $3.973 M, 0.0 FTE)
This non-recurring program provided grants that supported the development and implementation of a program for monitoring of rivers contaminated by the Gold King Mine Spill. The Agency will continue coordinating with the involved states and tribes from within core water programs.

**Indoor Air: Radon Program** (FY 2018 Annualized CR: $3.273 M, 10.6 FTE)
Within this program, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance, and advises the public of steps they can take to reduce exposure to radon. For over 30 years EPA's radon program has provided important guidance and significant funding to help states establish their own programs. This is a mature program where states have technical capacity to continue this work.

**Infrastructure Assistance: Mexico Border** (FY 2018 Annualized CR: $9.932 M, 0.0 FTE)
The program provides for the planning, design, and construction of water and wastewater treatment facilities along the U.S. Mexico border. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in U.S. communities along the border.

**LUST Prevention** (FY 2018 Annualized CR: $25.197 M, 0.0 FTE)
The program provides resources to states, tribes, territories, and intertribal consortia for their Underground Storage Tank (UST) programs, with a focus on inspections, enforcement, development of leak prevention regulations, and other program infrastructure. States could elect to maintain core program work with state resources rather than federal.

**Marine Pollution** (FY 2018 Annualized CR: $10.102 M, 37.4 FTE)
The program funds the implementation of regulatory and support activities relating to ocean discharges and related marine ecosystem protection activities. EPA will continue to meet statutory mandates through the core national water program.

**National Estuary Program / Coastal Waterways** (FY 2018 Annualized CR: $26.542 M, 43.6 FTE)
The program works to restore the physical, chemical, and biological integrity of estuaries and coastal watersheds. EPA will encourage states to continue this work and continue to implement conservation management plans.

**Pollution Prevention Program** (FY 2018 Annualized CR: $12.194 M, 58.1 FTE)
The program promotes environmentally sound business practices and the development of safer (green) chemicals, technologies, and processes. Partners can continue the best practices that have been shared through this program and continue efforts aimed at reducing pollution.

**RCRA: Waste Minimization & Recycling** (FY 2018 Annualized CR: $9.141 M, 51.0 FTE)
The program establishes a framework for redirecting materials away from disposal and towards beneficial uses, such as composting food waste, increasing the recycling of electronics, and reducing waste from federal facilities. EPA will focus its resources on core environmental work.

**Reduce Risks from Indoor Air** (FY 2018 Annualized CR: $13.386 M, 40.7 FTE)
This program addresses indoor environmental asthma triggers, such as secondhand smoke, dust mites, mold, cockroaches and other pests, household pets, and combustion byproducts through a variety of outreach, education, training and guidance activities. This is a mature program where states have technical capacity to continue this work.

**Regional Science and Technology** (FY 2018 Annualized CR: $1.406 M, 2.0 FTE)
The program supplies laboratory analysis, field monitoring and sampling, and builds tribal capacity for environmental monitoring and assessment. Central approach will be replaced with ad hoc efforts.

**Science Policy and Biotechnology** (FY 2018 Annualized CR: $1.479 M, 5.4 FTE)
The Scientific Advisory Panel (SAP) organizes and conducts reviews (typically six to ten each year) by independent, outside scientific experts of science documents, science policies, and/or science programs that relate to EPA's pesticide and toxic program activities. Statutory requirements will be absorbed by the pesticides and toxics programs.

**Small Minority Business Assistance** (FY 2018 Annualized CR: $1.573 M, 8.9 FTE)
This program provides technical assistance to small businesses, headquarters, and regional office employees to ensure that small minority businesses and minority academic institutions receive a fair share of EPA's procurement dollars and grants, where applicable. The Agency will integrate its resources for Small and Disadvantaged Business activities under the Small Business Ombudsman program.

**Stratospheric Ozone: Multilateral Fund** (FY 2018 Annualized CR: $8.677 M, 0.0 FTE)
This program promotes international compliance with the Montreal Protocol by financing the incremental cost of converting existing industries in developing countries to cost-effective ozone friendly technology. EPA will continue domestic ozone-depleting substances reduction work.

**Targeted Airshed Grants** (FY 2018 Annualized CR: $29.796 M, 0.0 FTE)
This program offers competitive grants to reduce air pollution in the top five most polluted nonattainment areas relative to annual ozone or PM2.5. This program is regional in nature, and affected states can continue to fund work through EPA's core air grant programs and statutes.

**Toxic Substances: Lead Risk Reduction Program** (FY 2018 Annualized CR: $13.203 M, 72.8 FTE)
The program addresses exposure to lead from lead-based paint through regulations, certification, and training programs and public outreach efforts. Lead paint certifications will continue under Chemical Risk Review Reduction program. Other forms of lead exposure are addressed through other targeted programs such as the State Revolving Funds to replace lead pipes.

**Trade and Governance** (FY 2018 Annualized CR: $5.777 M, 18.0 FTE)
This program promotes trade related activities focused on sustaining environmental protection. In FY 2019 EPA will focus its resources on core statutory work.

**U.S. Mexico Border** (FY 2018 Annualized CR: $3.012 M, 14.7 FTE)
The program addresses environmental protection of the U.S Mexico border in partnership with the ten (10) Border States, U.S. Tribal government, and the Government of Mexico. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in U.S. communities along the border. In FY 2019, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution.

**Water Quality Research and Support Grants** (FY 2018 Annualized CR: $16.686 M, 0.0 FTE)
The program focuses on the development and application of water quality criteria, the implementation of watershed management approaches, and the application of technological options to restore and protect water bodies. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision funds and set-asides from the Drinking Water State Revolving Fund (DWSRF).

**Eliminated Sub-Program Projects**

**Atmospheric Protection Program** (FY 2018 Annualized Continuing Resolution: Estimated $66.000 M)
The following voluntary climate-related partnership programs are proposed for elimination: AgSTAR, Center for Corporate Climate Leadership, Coalbed Methane Outreach Program, Combined Heat & Power Partnership, Global Methane Initiative, GreenChill Partnership, Green Power Partnership, Landfill Methane Outreach Program, Natural Gas STAR, Responsible Appliance Disposal Program, SF6 Reduction Partnership for Electric Power Systems, SmartWay, State and Local Climate Energy Program, and Voluntary Aluminum Industrial Partnership. (Note:

The FY 2019 President's Budget includes a proposal to authorize the EPA to administer the ENERGY STAR program through the collection of user fees.)

**Global Change Research (Research: AE)** (FY 2018 Annualized CR: $16.520 M, 48.5 FTE)
The program develops scientific information that supports policy makers, stakeholders, and society-at-large as they respond to climate change. This elimination prioritizes activities that support decision-making related to core environmental statutory requirements.

**STAR Research Grants (Research: AE, CSS, SSWR, SHC)** (FY 2018 Annualized CR: $28.284 M, 0.0 FTE)
The Science to Achieve Results, or STAR, funds research grants and graduate fellowships in environmental science and engineering disciplines through a competitive solicitation process and independent peer review. EPA will prioritize activities that support decision-making related to core environmental statutory requirements, as opposed to extramural activities.

**WaterSense (Surface Water Protection)** (FY 2018 Annualized CR: $3.079 M, 8.0 FTE)
WaterSense is a voluntary partnership program to label water-efficient products as a resource for helping to reduce water use.

## Expected Benefits of E-Government Initiatives

**eRulemaking**

The eRulemaking Line of Business is designed to enhance public access and participation in the regulatory process through electronic systems; reduce the burden on citizens and businesses in finding relevant regulations and commenting on proposed rulemaking actions; consolidate redundant docket systems; and improve agency regulatory processes and the timeliness of regulatory decisions. EPA is currently the managing partner for this Line of Business; however, in FY2019 EPA will work with the Office of Management and Budget and the National Archives and Records Administration (NARA) towards transferring management services to the NARA/Office of the Federal Register.

The eRulemaking program's Federal Docket Management System (FDMS) currently supports more than 178 federal entities including all Cabinet-level Departments and independent rulemaking agencies, which collectively promulgate approximately 90 percent of all federal regulations each year. FDMS has simplified the public's participation in the rulemaking process and made EPA's rulemaking business processes more accessible as well as transparent. FDMS provides EPA's approximately 1,372 active users with a secure, centralized electronic repository for managing agency rulemaking development via distributed management of data and robust role-based user access. EPA posts regulatory and non-regulatory documents in *Regulations.gov* for public viewing, downloading, bookmarking, email notification and commenting. Overall, EPA currently provides public access to 1,078,121 documents in *Regulations.gov*.

| Fiscal Year | Account Code | EPA Service Fee (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-0060-24 | $1,000.0 |
| 2018 | 020-99-99-99-99-0060-24 | $1,000.0 |
| 2019 | 020-99-99-99-99-0060-24 | $1,000.0 |

**Geospatial Line of Business**

The Geospatial Line of Business is an intergovernmental project to improve the ability of the public and government to use geospatial information to support the business of government and facilitate decision-making. This initiative will reduce costs and improve agency operations in several areas.

With the implementation of the National Spatial Data Infrastructure Strategic Plan, the geospatial data sets known as National Geospatial Data Assets (NDGA) and associated analytical services have become available on the National Geospatial Platform. These additional datasets and services are easily accessible by federal agencies, their partners, and stakeholders. EPA uses the National Geospatial Platform to obtain data and services for internal analytical purposes as well as to publish outward-facing geospatial capabilities to the public.

While the Department of the Interior is the managing partner, EPA continues to be a leader in developing the vision and operational plans for the implementation of OMB guidance on Coordination of Geographic Information and Related Spatial Data Activities and the National Geospatial Platform which incorporates many national geospatial data and analytical services for

federal agencies, their partners, and stakeholders. EPA is expected to contribute to the operation of the National Geospatial Platform in FY 2019. The intent is to reduce base costs by providing an opportunity for EPA and other agencies to share approaches on procurement consolidation and include shared services for hosting geospatial data, services and applications.

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-3100-24 | $225.0 |
| 2018 | 020-99-99-99-99-3100-24 | $225.0 |
| 2019 | 020-99-99-99-99-3100-24 | $225.0 |

**USA Jobs**

U.S. Office of Personnel Management (OPM) USA Jobs simplifies the process of locating and applying for federal jobs. USA Jobs is a standard job announcement and resume builder website. It is the one-stop for federal job seekers to search for and apply to positions on-line. This integrated process benefits citizens by providing a more efficient process to locate and apply for jobs, and assists federal agencies in hiring top talent in a competitive marketplace. The OPM USA Jobs initiative has increased job seeker satisfaction with the federal job application process and is helping the Agency to locate highly-qualified candidates and improve response times to applicants.

The Agency is required to integrate with USA Jobs, to eliminate the need for applicants to maintain multiple user IDs to apply for federal jobs across agencies. The vacancy announcement format has been improved for easier readability. The system can maintain up to five resumes per applicant, which allows them to create and store resumes tailored to specific skills. In addition, USA Jobs has a notification feature that keeps applicants updated on the current status of the application, and provides a link to the Agency's website for detailed information. This self-help USA Jobs feature allows applicants to obtain up-to-date information on the status of their application upon request.

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-1218-24 | $116.0 |
| 2018 | 020-99-99-99-99-1218-24 | $125.0 |
| 2019 | 020-99-99-99-99-1218-24 | $129.0 |

**Financial Management Line of Business**

The Financial Management Line of Business (FM LoB) is a multi-agency effort whose goals include: achieving process improvements and cost savings in the acquisition, development, implementation, and operation of financial management systems. By incorporating the same FM LoB-standard processes as those used by central agency systems, interfaces among financial systems will be streamlined and the quality of information available for decision-making will be improved.

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-1100-24 | $96.0 |
| 2018 | 020-99-99-99-99-1100-24 | $96.0 |
| 2019 | 020-99-99-99-99-1100-24 | $96.0 |

**Grants.gov**

The Grants.gov initiative benefits EPA and its grant programs by providing a single location to publish grant opportunities and application packages, and by providing a single site for the grants community to apply for grants using common forms, processes and systems. EPA believes that the central site raises the visibility of its grants opportunities to a wider diversity of applicants.

The grants community benefits from savings in postal costs, paper and envelopes. Applicants save time in searching for agency grant opportunities and in learning the application systems of various agencies. In order to streamline the application process, EPA offers Grants.gov application packages for mandatory State grants (i.e., Continuing Environmental Program Grants).

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-0160-24 | $217.0 |
| 2018 | 020-99-99-99-99-0160-24 | $307.0 |
| 2019 | 020-99-99-99-99-0160-24 | $276.0 |

**Budget Formulation and Execution Line of Business**

The Budget Formulation and Execution Line of Business (BFELoB) allows EPA and other agencies to access budget-related benefits and services. The Agency has the option to implement LoB-sponsored tools, training and services.

EPA has benefited from the BFELoB by sharing valuable information on how systems and software being developed by the LoB have enhanced work processes. This effort has created a government-only capability for electronic collaboration (*Wiki*) in which the Budget Community website allows EPA to share budget information internally, with OMB, and with other federal agencies. The Agency also made contributions to the Human Capital Workgroup, participating in development of on-line training modules for budget activities – a valuable resource to all agency budget staff. The LoB has developed the capability to have secure, virtual on-line meetings where participants can view budget-related presentations from their workspace and participate in the discussion through a conference line. The LoB provides regularly scheduled symposia as an additional forum for EPA budget employees.

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-3200-24 | $110.0 |
| 2018 | 020-99-99-99-99-3200-24 | $110.0 |
| 2019 | 020-99-99-99-99-3200-24 | $110.0 |

**Human Resources Line of Business**

The U.S. Office of Personnel Management (OPM) Human Resources Line of Business (HR LoB) provides the federal government the infrastructure to support pay-for-performance systems, modernized HR systems, and the core functionality necessary for the strategic management of human capital.

The OPM HR LoB offers common solutions that will enable federal departments and agencies to work more effectively, and provide managers and executives across the federal government an improved means to meet strategic objectives. EPA will benefit by supporting an effective program management activity which evaluates provider performance, customer satisfaction, and compliance with program goals, on an ongoing basis.

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-1200-24 | $65.0 |
| 2018 | 020-99-99-99-99-1200-24 | $68.0 |
| 2019 | 020-99-99-99-99-1200-24 | $68.0 |

**Integrated Acquisition Environment**

The Integrated Acquisition Environment (IAE) is currently comprised of nine government-wide automated applications and/or databases that have contributed to streamlining the acquisition business process across the government. In FY 2012, GSA began the process of consolidating the systems into one central repository called the System for Award Management (SAM). Until the consolidation is complete, EPA continues to leverage the usefulness of some of these systems via electronic linkages between EPA's acquisition system and the IAE shared systems. Other IAE systems are not linked directly to EPA's acquisition system, but benefit the Agency's contracting staff and vendor community as stand-alone resources.

EPA's acquisition system uses data provided by SAM to replace internally maintained vendor data. Contracting officers can download vendor-provided representation and certification information electronically via SAM as well, which allows vendors to submit this information once rather than separately for every contract proposal. Contracting officers are able to access the Excluded Parties List (EPLS) via SAM to identify vendors that are debarred from receiving contract awards.

Contracting officers also can link to the Wage Determination Online (WDOL) to obtain information required under the Service Contract Act and the Davis-Bacon Act. EPA's acquisition system links to the Federal Procurement Data System (FPDS) for submission of contract actions at the time of award. FPDS provides public access to government-wide contract information. The Electronic Subcontracting Reporting System (eSRS) supports vendor submission of subcontracting data for contracts identified as requiring this information. EPA submits synopses of procurement opportunities over $25,000 to the Federal Business Opportunities (FBO) website, where the information is accessible to the public. Vendors use this website to identify business opportunities in federal contracting.

Further, the Federal Funding Accountability and Transparency Act (FFATA) requires agencies to unambiguously identify contract, grant, and loan recipients and determine parent/child relationship and address information. The FFATA taskforce determined that using both the Dun and Bradstreet (D&B) DUNS Number (standard identifier for all business lines) and Central Contractor Registration (CCR, the single point of entry for data collection and dissemination) are the most appropriate ways to accomplish this. This fee will pay for EPA's use of this service in the course

of reporting grants and/or loans. Funds also may be used to consolidate disparate contract and grant systems into the new SAM.

| Fiscal Year | Account Code | EPA Service Fee (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-0230-24 | $857.0 |
| 2018 | 020-99-99-99-99-0230-24 | $874.0 |
| 2019 | 020-99-99-99-99-0230-24 | $944.0 |

**Federal PKI Bridge**

Federal Public Key Infrastructure (FPKI) provides the government with a common infrastructure to administer digital certificates and public-private key pairs, including the ability to issue, maintain, and revoke public key certificates. FPKI leverages a security technique called Public Key Cryptography to authenticate users and data, protect the integrity of transmitted data, and ensure non-repudiation and confidentiality.

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-0090-24 | $30.0 |
| 2018 | 020-99-99-99-99-0090-24 | $32.0 |
| 2019 | 020-99-99-99-99-0090-24 | $93.0 |

**Freedom of Information Act Portal**

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed the Office of Management and Budget and the Department of Justice (DOJ) to build a consolidated online request portal that allows a member of the public to submit a request for records to any agency from a single website. DOJ is managing the development and maintenance of this National FOIA Portal. EPA and other federal agencies were asked to contribute to this effort. In FY 2019, EPA's contribution is $34K.

| Fiscal Year | Account Code | EPA Contribution (in thousands) |
|---|---|---|
| 2017 | 020-99-99-99-99-xxxx-24 | $0.0 |
| 2018 | 020-99-99-99-99-xxxx-24 | $0.0 |
| 2019 | 020-99-99-99-99-xxxx-24 | $34.0 |

## FY 2019 Administrator's Priorities

Funding for the Administrator's priorities are allocated by program project in the FY 2019 President's Budget with a total of $2.375 million in the Environmental and Program Management Account and $125 thousand in the Science and Technology Account.

These funds, which are set aside for the Administrator's priorities, are used to address unforeseen issues that may arise during the year. These funds are used by the Administrator to support critical unplanned issues and the amounts shown in the below table will be reallocated as needed, in accordance with reprogramming limits.

**FY 2019 President's Budget Funding for Administrator's Priorities**

| Appropriation | Program Project | Dollars in Thousands |
|---|---|---|
| EPM | Acquisition Management | $150 |
| EPM | Brownfields | $25 |
| EPM | Civil Enforcement | $150 |
| EPM | Civil Rights / Title VI Compliance | $75 |
| EPM | Compliance Monitoring | $100 |
| EPM | Criminal Enforcement | $145 |
| EPM | Drinking Water Programs | $100 |
| EPM | Exchange Network | $75 |
| EPM | Federal Stationary Source Regulations | $100 |
| EPM | Federal Support for Air Quality Management | $130 |
| EPM | Human Resources Management | $25 |
| EPM | International Sources of Pollution | $50 |
| EPM | IT / Data Management | $175 |
| EPM | Legal Advice: Environmental Program | $100 |
| EPM | Legal Advice: Support Program | $75 |
| EPM | NEPA Implementation | $100 |
| EPM | Pesticides: Protect Human Health from Pesticide Risk | $150 |
| EPM | Pesticides: Protect the Environment from Pesticide Risk | $150 |
| EPM | Pesticides: Realize the Value of Pesticide Availability | $100 |
| EPM | RCRA: Waste Management | $25 |
| EPM | Science Advisory Board | $100 |
| EPM | State and Local Prevention and Preparedness | $100 |
| EPM | Surface Water Protection | $50 |
| EPM | TRI / Right to Know | $75 |
| EPM | Tribal - Capacity Building | $50 |
| S&T | Federal Support for Air Quality Management | $25 |
| S&T | Research: Air and Energy | $50 |
| S&T | Research: Chemical Safety and Sustainability | $50 |
| **Total** | | **$2,500** |

## Proposed FY 2019 Administrative Provisions

To further clarify proposed Administrative Provisions that involve more than a simple annual extension or propose a modification to an existing provision, the following information is provided.

### Establishment of Authority for Energy Star Fee Collection and Use

The Budget includes a proposal to authorize the EPA to administer the ENERGY STAR program through the collection of user fees. Fee collections would begin after EPA undertakes a rulemaking process to determine which products would be covered by fees and the level of fees and to ensure that a fee system would not discourage manufacturers from participating in the program or result in a loss of environmental benefits. The fee collections would provide funding to cover an upfront appropriation, and continued expenses to develop, operate, and maintain the ENERGY STAR program. The legislative proposal to authorize collection and spending of the fees is as follows:

*Section 131 of The Energy Policy and Conservation Act, as amended, 42 U.S.C. §6294A, is amended by inserting after paragraph (d):*

*"(e)* ***User Fees***

***(1) In General***

*In accordance with paragraph (a), the Administrator may prescribe by regulation, for application in fiscal year 2019 and in subsequent fiscal years, reasonable fees as the Administrator determines to be necessary to defray costs incurred for entities that participate in the ENERGY STAR program. The regulation will ensure that the fee imposed on each entity is sufficient and not more than reasonably necessary to cover a proportional share of ENERGY STAR program costs incurred in operating and maintaining the Energy Star program, including collection and processing fees. The Administrator shall amend this regulation periodically so as to ensure that the schedule of fees covers such program costs.*

***(2) Collection of Fees.*** *The Administrator shall prescribe procedures to collect the fees.*

***(3) Availability of Fees.***

***(A)*** *Such fees shall be collected and available for ENERGY STAR program administration functions performed by the Agency in an amount and to the extent provided in advance in appropriations acts."*

### Petroleum Set-Aside for Brownfields Projects Grants

Per the Consolidated Appropriations Act, 2017 (P.L. 115-31), EPA appreciates the flexibility to use no more than 25 percent of its CERCLA Section 104 (k) funding to address petroleum contaminated sites. In FY 2019, EPA continues to request the flexibility to use up to 25 percent of its CERCLA 104 (k) funding to address petroleum contaminated sites versus an exact 25 percent identified by statute. Current statutory language requires that exactly 25 percent of Brownfields Projects grants be provided for petroleum cleanups. The proposed language gives the Agency more

flexibility to award grants to the highest-ranking proposals, regardless of the type of funding requested, while still setting aside money for petroleum cleanups.

*$62,000,000 shall be to carry out section 104(k) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, including grants, interagency agreements, and associated program support costs: Provided, That not more than 25 percent of the amount appropriated to carry out section 104(k) of CERCLA shall be used for site characterization, assessment, and remediation of facilities described in section 101(39)(D)(ii)(II) of CERCLA.*

**Issuing Grants for $PM_{2.5}$ Monitoring Network under Clean Air Act Sections 103 and 105**

Per the Consolidated Appropriations Act, 2017 (P.L. 115-31), EPA is directed to use Section 103 of the Clean Air Act to provide grants to states for the $PM_{2.5}$ monitoring network. Accordingly, EPA continues to issue grants to states for the network exclusively under Section 103. EPA requests the flexibility to use both Sections 103 and 105 authorities under the Clean Air Act to issue grants to states for the $PM_{2.5}$ monitoring network.

*X shall be for grants, including associated program support costs, to states, federally recognized tribes, interstate agencies, Tribal consortia, and air pollution control agencies for multi-media or single media pollution prevention, control and abatement, and related activities, including activities pursuant to the provisions set forth under this heading in Public Law 104-134, and for making grants under Sections 103 and 105 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator.*

Current statutory language directs EPA to issue grants in support of the $PM_{2.5}$ monitoring under Section 103 of the Clean Air Act. However, given the maturity of the $PM_{2.5}$ monitoring network, it is appropriate for EPA to provide grants to states to fund the network under Section 105 of the Clean Air Act. The $PM_{2.5}$ monitoring network is a continuing activity in support of air quality management, which aligns with authorized activities under Section 105, whereas Section 103 is intended to fund research, demonstration, and other similar activities. The proposed language gives the Agency more flexibility to award grants under Section 103 and 105 authorities. The Clean Air Act Section 105 authority provides for cost-sharing between EPA and the states with up to 60 percent of costs provided by EPA.

**FIFRA and PRIA Fee Spending Restrictions**

Current statutory language in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Pesticide Registration Improvement Act (PRIA) restricts what activities EPA can fund from collections deposited in the Reregistration and Expedited Processing Revolving Fund and PRIA Fund. The FY 2019 President's Budget carries forward the proposed statutory language from the FY 2018 President's Budget to clarify the Agency's authority to utilize resources in the Funds, to review existing pesticide registrations for their compliance with current FIFRA standards, and to ensure market access for pesticide registrants. Specifically, fees collected would be available for the following activities as they relate to pesticide licensing: processing and review of data submitted in association with a registration; information submitted pursuant to Section 6(a)(2) of

FIFRA; supplemental distributor labels, transfers of registrations and data compensation rights, additional uses registered by states under Section 24(c) of FIFRA; data compensation petitions, review of minor amendments and notifications; laboratory support and audits; administrative support; development of policy and guidance; rulemaking support; information collection activities; and the portions of salaries related to work in these areas.

The proposed statutory language would ease spending restrictions related to both the FIFRA pesticide maintenance fees and the PRIA registration fees. Since the FIFRA fees are mandatory, separate language has been prepared that will be transmitted at a later date. EPA understands that the passage of PRIA-4 may change the need for this proposal. The PRIA fees are discretionary and the accompanying proposed language is as follows:

*Notwithstanding any other provision of law, in addition to the activities specified in section 33 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136w-8), fees collected in this and prior fiscal years under such section shall be available for the following activities as they relate to pesticide licensing: processing and review of data submitted in association with a registration;, information submitted pursuant to section 6(a)(2) of FIFRA; supplemental distributor labels, transfers of registrations and data compensation rights; additional uses registered by States under section 24(c) of FIFRA; data compensation petitions, review of minor amendments, and notifications; laboratory support and audits; administrative support; development of policy and guidance; rulemaking support; information collection activities; and the portions of salaries related to work in these areas.*

**Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)**

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of the (TSCA). The amendments provide authority to the Agency to establish fees for certain activities under Sections 4, 5, and 6 of TSCA, as amended, to defray 25 percent of the costs of administering these Sections and Section 14. The amendments removed the previous cap that the Agency may charge for pre-manufacturing notification reviews. Fees collected under the TSCA Fees Rule will be deposited in the TSCA Service Fee Fund for use by the EPA. This fee structure, once finalized, will replace the existing Pre-Manufacturing Notification Fees. The legislative proposal to authorize collection and spending of the fees is as follows:

*The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with Section 26(b) of the Toxic Substances Control Act (15 U.S.C. 2625(b)) for Fiscal Year 2019.*

**Hazardous Waste Electronic Manifest**

The Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In FY 2019, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $39 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund.

Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will be utilized for the operation of the system and necessary program expenses. Fees will fully support the e-Manifest program, including future development costs. The legislative proposal to authorize collection and spending of the fees is as follows:

*The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2019.*

**Oil and Chemical Facility Compliance Assistance**

The FY 2019 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for facilities who are required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act and for facilities who are required to prepare and submit a Risk Management Plan under Section 112(r)(7) of the Clean Air Act. These fees are discretionary and would start in FY 2019 after the Agency establishes procedures for making and accepting a facility's request for voluntary assistance. The fees are offsetting collections and would provide for necessary expenses, including the development, operation, and maintenance of this voluntary compliance assistance service.

The legislative proposals to authorize collection and spending of the fees are as follows:

- *Oil Spill: Prevention, Preparedness, and Response*

*The Administrator of the Environmental Protection Agency may collect fees to provide compliance assistance services for owners and operators of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j)): Provided, That fees collected for compliance assistance services pursuant to the authority provided in this paragraph by the Administrator in fiscal year 2019 shall be deposited in the Inland Oil Spill Programs account and shall remain available until expended for the expenses of providing compliance assistance services: Provided further, That the amount of such fees shall be based on the amount of compliance assistance services provided by the agency: Provided further, That the owner or operator of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit a Spill Prevention Control and Countermeasure Plan or a Facility Response Plan under section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j))may request that the Administrator conduct an on-site walk-through of the facility to assist the owner or operator in complying with such section: Provided further, That the walk-through shall be conducted within one year of an accepted request: Provided further, That the Administrator may establish procedures for making and accepting such a request: Provided further, That observations, findings, conclusions, and recommendations made by the Administrator when conducting an on-site walk-through, including any report after an on-site walk-through, shall not in any private action or suit for damages or bodily injury, or in any action under section 505 of the Federal Water Pollution Control Act (33*

*U.S.C. 1365), be used or admitted as evidence: Provided further, That the Administrator may, by guidance, establish policies for the use of such evidence in actions under the Act.*

- *State and Local Prevention and Preparedness*

*The Administrator of the Environmental Protection Agency may collect fees to provide compliance assistance services for owners or operators of a stationary source required to prepare and submit a Risk Management Plan under section 112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)): Provided, That fees collected for compliance assistance services pursuant to the authority provided in this paragraph by the Administrator in fiscal year 2019 shall be deposited in the Environmental Programs and Management account and shall remain available until September 30, 2020 for the expenses of providing compliance assistance services: Provided further, That the amount of such fees shall be based on the amount of compliance assistance services provided by the agency: Provided further, That the owner or operator of a stationary source required to prepare and submit, or that has prepared and submitted, a Risk Management Plan under section 112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)) may request that the Administrator conduct an on-site walk-through of the stationary source to assist the owner or operator in complying with such section: Provided further, That the walk-through shall be conducted within one year of an accepted request: Provided further, That the Administrator may establish procedures for making and accepting such a request: Provided further, That the observations, findings, conclusions, and recommendations made by the Administrator when conducting an on-site walk-through, including any report after an on-site walk-through, shall not in any private action or suit for damages or bodily injury, or in any action under section 304 of the Clean Air Act (42 U.S.C. 7604), be used or admitted as evidence: Provided further, That the Administrator may, by guidance, establish policies for the use of such evidence in actions under the Act.*

## Attorney Fee and Cost Payments Obligated in FY 2017 Under Equal Access for Justice Act (EAJA) as a Result of Defensive Environmental Litigations under Environmental Statutes

| Date of Final fee agreement or court disposition | Case Name | Court | Case Number | Judge | Case Disposition | Amount of Fees and/or Costs Paid | Source of Funds | Was amount negotiated or court ordered? | Recipients | Nature of Case |
|---|---|---|---|---|---|---|---|---|---|---|
| 6/27/2017 | Pollinator Stewardship Council; American Honey Producers Association; National Honey Bee Advisory Board; American Beekeeping Federation; Thomas R. Smith; Bret L Adee; Jeffrey S. Anderson v. EPA | United States Court of Appeals for the Ninth Circuit | 13-72346 | Appellate Commissioner, Peter L. Shaw | Court Ordered | $287,850.88 | EPA Appropriations | Court Ordered after litigation of fees | Earthjustice | Petitioners challenged the registration of pesticide active ingredient sulfoxaflor due to its risk to honeybees. |

## Fiscal Year 2019: Consolidations, Realignments, or Other Transfers of Resources

This table shows consolidations, realignments, or other transfers of resources and personnel from one program/project to another in order to clearly illustrate a transfer of FY 2019 resources (Dollars in Thousands).

| Program/ Project | Total Fund Transferred From: | FTE Transferred From: | Total Fund Transferred To: | FTE Transferred To: | Purpose |
|---|---|---|---|---|---|
| EPM: Toxic Substances: Chemical Risk Review and Reduction | | (2.0) | | | This realignment of FTE from the Office of Chemical Safety and Pollution Prevention's Chemical Risk Review and Reduction program to the Office of Research and Development's Chemical Safety and Sustainability research program's Computational Toxicology (CompTox) program is to support risk assessment and evaluation science to support new TSCA requirements. |
| S&T: Research: Chemical Safety and Sustainability | | | | 2.0 | |

## Physicians' Comparability Allowance (PCA) Worksheet for BY 2019

## Environmental Protection Agency

## Table 1

| | | PY 2017 (Actual) | CY 2018 (Estimates) | BY 2019 (Estimates) |
|---|---|---|---|---|
| 1) Number of Physicians Receiving PCAs | | 4 | 4 | 4 |
| 2) Number of Physicians with One-Year PCA Agreements | | | | |
| 3) Number of Physicians with Multi-Year PCA Agreements | | 4 | 4 | 4 |
| 4) Average Annual PCA Physician Pay (without PCA payment) | | $143,326 | $144,759 | $144,759 |
| 5) Average Annual PCA Payment | | $24,419 | $24,419 | $24,419 |
| 6) Number of Physicians Receiving PCAs by Category (non-add) | Category I Clinical Position | | | |
| | Category II Research Position | 4 | 4 | 4 |
| | Category III Occupational Health | | | |
| | Category IV-A Disability Evaluation | | | |
| | Category IV-B Health and Medical Admin. | | | |

7) If applicable, list and explain the necessity of any additional physician categories designated by your agency (for categories other than I through IV-B). Provide the number of PCA agreements per additional category for the PY, CY and BY.

EPA expects no additional categories to be applicable in the foreseeable future.

8) Provide the maximum annual PCA amount paid to each category of physician in your agency and explain the reasoning for these amounts by category.

The maximum allowance being paid to a Category II Research Position is $29,900.

9) Explain the recruitment and retention problem(s) for each category of physician in your agency (this should demonstrate that a current need continues to persist).

(*Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*
Historically, the number of EPA Research Physicians is between four and six positions. This small population experiences modest turnover. The value of the physicians' comparability allowance to EPA is as a retention tool.

10) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

(*Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*
We are told regularly that absent the allowance, some EPA research physicians would seek employment at federal agencies that provide the allowance.

11) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

An agency with a very small number of physician positions and a low turn-over rate among them still needs the allowance authority to maintain the stability of the small population. Those who opt for federal employment in opposition to private sector employment still want the maximum pay available in the federal sector. Were it not for the PCA, EPA would regularly lose some of its physicians to other federal agencies that offer the allowance, requiring EPA to refill vacant positions. Turn-over statistics should be viewed in this light.

## FY 2019 IT Resource Statements

| OMB Requirement | EPA Statement | Signature/Date |
|---|---|---|
| **A statement from the CIO indicating the extent to which the CIO has reviewed and had significant input in approving IT investments included in this budget request. *For example, if the CIO has reviewed and approved all the investments from bureau/component/Operating Division/Mode A, B, and C, but not D, then the statement must identify that the CIO reviewed and approved investments from bureau/component/Operating Division/Mode A, B, and C.*** | The Deputy CIO had significant input in approving IT investments operated by the Office of Environmental Information. In addition, he has reviewed the topline budget numbers for the entire Agency's IT investments portfolio with a focus on toplines by CPIC level, by appropriation, by program, and on new and eliminated investments. In addition, the Deputy CIO reviewed significant changes that have been made to the major, non-standard, and standard investments since the initial BY19 submission. | 1/22/18<br>Dr. Steven Fine<br>Deputy Chief Information Officer |
| **A statement from the Chief Financial Officer (CFO) and CIO identifying the extent to which the CIO had a significant role in reviewing planned IT support for major programs and significant increases and decreases in IT resources reflected in this budget.** | For the FY19 Passback, the Acting CIO provided input to the CFO on IT budget concerns/priorities: Cybersecurity Support, Exchange Network/Central Data Exchange/Toxic Release Inventory maintenance support; Shared Services/IT Modernization initiative (for both financial and mission systems); and e-Discovery support. The Passback provided additional support for Cybersecurity and for financial shared services/modernization. | 1/22/18<br>David Bloom<br>Deputy Chief Financial Officer<br><br>1/22/18<br>Dr. Steven Fine<br>Deputy Chief Information Officer |

| OMB Requirement | EPA Statement | Signature/Date |
|---|---|---|
| **An update of the CIO's common baseline rating for Element D (CIO reviews and approves major IT investment portion of the budget.)**<br><br>**1. Incomplete – Agency has not started development of a plan describing the changes it will make to ensure that all baseline FITARA responsibilities are in place.**<br>**2. Partially addressed – Agency is working to develop a plan describing the changes it will make to ensure that all baseline FITARA responsibilities are in place.**<br>**3. Fully implemented – Agency has developed and implemented it's plan to ensure that all common baseline FITARA responsibilities are in place.** | We rate this as a 2, partially addressed, as the compressed budget submission schedules for FY18 and FY19 have not allowed the CIO to engage in formulation as envisioned in the FITARA implementation plan. | 1/22/18<br>David Bloom<br>Deputy Chief Financial Officer<br><br>1/22/18<br>Dr. Steven Fine<br>Deputy Chief Information Officer |
| **The extent to which the CIO and certify the use of incremental development. For example, if the CIO can certify that all the Investments from bureau/component/operating divisions A, B, and C but not D...are using incremental development practices, then the statement must identify that the CIO certifies that investments from A, B, and C are using incremental development practices.** | EPA has one major investment that has been certified as employing incremental development practices. EPA's activities in migration to Agile to data have focused on standing up support structures to assist IT projects in migrating to Agile methodologies. This includes a fellowship program to bring in Agile experts and a Developer's Guild. In addition, Agile development methodologies are discussed, as appropriate, at FITARA acquisition reviews and IT Portfolio Reviews. EPA is planning to publish FITARA policy that will clarify the certification process. | 1/22/18<br>Dr. Steven Fine<br>Deputy Chief Information Officer |

# IG's Comments on the FY 2019 President's Budget

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

FEB 9 2018

The Honorable Mick Mulvaney
Director
Office of Management and Budget
Executive Office of the President
Washington, D.C. 20503

Dear Mr. Mulvaney:

As you are aware, the Inspector General Act of 1978, as amended, 5 U.S.C. app. 3, § 6(g)(2), provides that:

> In transmitting a proposed budget to the President for approval, the head of each establishment or designated Federal entity shall include-…(D) any comments of the affected Inspector General with respect to the proposal.

The proposed fiscal year (FY) 2019 budget creates a significant challenge for the U.S. Environmental Protection Agency's (EPA's) Office of Inspector General (OIG) and its ability to accomplish its agency oversight mission. The Office of Management and Budget (OMB) request uses the FY 2018 Annualized Continuing Resolution as the basis for the FY 2019 submission. A budget at this level would destabilize the OIG and have an immediate negative impact on the OIG's production capacity. As such, I do not agree with the President's Budget request, and argue that such a proposal would substantially inhibit the OIG from performing the duties of the office, including mandatory OIG responsibilities explicitly required by federal law.

The OIG's primary deliverables are audits, evaluations, and criminal and employee misconduct investigations. All of these activities are labor intensive. A budget of $46 million will virtually eliminate the OIG's ability to perform discretionary audits and evaluations. These services assist EPA leadership and Congress, help to hold the agency accountable, and are valuable management tools that represent a substantial source of the OIG's ability to produce a positive return on investment to taxpayers. Further, the OIG's mandatory audits and investigations are not performed by any other entity within the EPA. As such, untimely responses due to limited resources create an unacceptable risk to the agency and to the taxpayers' investment.

I urgently and respectfully request that the OMB recognize the work the EPA OIG has done in reshaping the workforce, and the greater vulnerability to the agency that any reduction of OIG funding would create, along with the loss of return on investment it would represent. I also request that the OIG's budget request of $62 million, which is consistent with my FY 2017 request, be recognized. If not, as

provided by the Inspector General Act, I request that these comments be included in transmitting the President's Budget to Congress.

If you or your staff have any questions, or would like to meet to discuss this matter, you may reach me at (202) 566-0847 or elkins.arthur@epa.gov.

Sincerely,

Arthur A. Elkins Jr.

cc: Michael Horowitz, Chair, Council of the Inspectors General on Integrity and Efficiency
Matthew Z. Leopold, General Counsel, EPA
David Bloom, Deputy Chief Financial Officer, EPA

# EPA Budget by National Program Manager and Major Office

Dollars in Thousands

| | | FY 2018 Annualized Continuing Resolution | | | | FY 2019 President's Budget | | | |
|---|---|---|---|---|---|---|---|---|---|
| NPM | Major Office | Pay ($K) | Non-Pay ($K) | Total ($K) | FTE | Pay ($K) | Non-Pay ($K) | Total ($K) | FTE |
| OA | Immediate Office | $4,724.0 | $688.3 | $5,412.3 | 23.8 | $2,739.3 | $524.0 | $3,263.3 | 17.1 |
| | Office of Congressional and Intergovernmental Relations | $5,700.1 | $539.5 | $6,239.5 | 51.6 | $6,370.9 | $206.0 | $6,576.9 | 40.3 |
| | Office of Public Affairs | $5,969.7 | $414.5 | $6,384.2 | 38.9 | $4,827.3 | $147.0 | $4,974.3 | 30.5 |
| | Office of Public Engagement | $1,844.2 | $89.0 | $1,933.2 | 12.0 | $1,900.3 | $53.0 | $1,953.3 | 12.0 |
| | Office of Policy | $23,816.6 | $4,336.1 | $28,152.7 | 140.9 | $26,478.6 | $3,799.0 | $30,277.6 | 139.0 |
| | Children's Health Protection | $2,430.6 | $3,016.0 | $5,446.6 | 15.4 | $902.4 | $539.0 | $1,441.4 | 4.9 |
| | Environmental Education | $918.1 | $6,176.9 | $7,095.0 | 6.1 | $0.0 | $2,000.0 | $2,000.0 | - |
| | Office of Civil Rights | $3,388.8 | $919.8 | $4,308.5 | 24.6 | $3,145.9 | $346.0 | $3,491.9 | 18.5 |
| | Executive Secretariat | $2,244.1 | $144.2 | $2,388.4 | 14.6 | $1,741.0 | $42.0 | $1,783.0 | 11.0 |
| | Executive Services | $2,905.7 | $313.7 | $3,219.3 | 18.9 | $2,360.7 | $161.0 | $2,521.7 | 14.9 |
| | Homeland Security | $1,951.5 | $473.7 | $2,425.2 | 9.7 | $2,023.6 | $305.0 | $2,328.6 | 9.3 |
| | Science Advisory Board | $3,102.1 | $741.4 | $3,843.5 | 21.6 | $3,674.2 | $104.0 | $3,778.2 | 18.7 |
| | Small and Disadvantaged Business Utilization | $1,650.8 | $1,184.4 | $2,835.2 | 11.3 | $465.6 | $650.0 | $1,115.6 | 2.4 |
| | Regional Resources | $26,579.9 | $3,487.5 | $30,067.4 | 190.9 | $31,504.3 | $2,504.0 | $34,008.3 | 199.5 |
| | **TOTAL** | **$87,226.0** | **$22,525.0** | **$109,751.0** | **580.3** | **$88,134.0** | **$11,380.0** | **$99,514.0** | **518.1** |
| | | | | | | | | | |
| OAR | Immediate Office | $8,803.3 | $11,533.8 | $20,337.1 | 62.5 | $7,253.0 | $5,422.3 | $12,675.3 | 42.7 |
| | Office of Air Quality Planning and Standards | $50,839.4 | $17,735.6 | $68,575.0 | 359.6 | $38,654.1 | $8,640.7 | $47,294.8 | 240.7 |
| | Office of Atmospheric Programs | $36,715.9 | $71,896.4 | $108,612.3 | 228.7 | $20,434.4 | $12,488.4 | $32,922.8 | 117.4 |
| | Office of Transportation and Air Quality | $51,951.7 | $49,389.3 | $101,341.0 | 343.2 | $48,438.7 | $25,297.9 | $73,736.6 | 296.7 |
| | Office of Radiation and Indoor Air | $22,972.8 | $14,818.9 | $37,791.7 | 149.8 | $10,863.9 | $5,033.2 | $15,897.0 | 67.0 |
| | Regional Resources | $85,510.9 | $341,406.0 | $426,916.9 | 604.8 | $62,069.9 | $174,944.5 | $237,014.4 | 405.3 |
| | **TOTAL** | **$256,794.0** | **$506,780.0** | **$763,574.0** | **1,748.6** | **$187,714.0** | **$231,827.0** | **$419,541.0** | **1,169.8** |
| | | | | | | | | | |
| OARM | Immediate Office | $7,017.7 | $23,538.6 | $30,556.3 | 45.0 | $8,383.0 | $23,113.5 | $31,496.5 | 37.0 |
| | Administrative Law Judges | $1,903.6 | $197.5 | $2,101.2 | 13.5 | $2,364.5 | $35.0 | $2,399.5 | 12.5 |
| | Environmental Appeals Board | $2,038.8 | $205.6 | $2,244.4 | 12.3 | $2,139.1 | $27.0 | $2,166.1 | 11.3 |
| | Office of Acquisition Management | $30,502.0 | $10,015.5 | $40,517.5 | 216.0 | $24,042.8 | $6,974.7 | $31,017.5 | 158.8 |
| | Office of Administration | $19,244.5 | $322,630.9 | $341,875.4 | 97.8 | $17,755.8 | $324,296.4 | $342,052.3 | 85.6 |
| | Office of Human Resources | $20,390.1 | $5,906.2 | $26,296.3 | 100.9 | $19,578.3 | $6,703.4 | $26,281.7 | 88.6 |
| | Office of Grants & Debarment | $10,827.9 | $4,375.0 | $15,202.9 | 73.0 | $7,889.0 | $4,296.7 | $12,185.8 | 49.0 |
| | OARM RTP | $9,429.0 | $30,672.2 | $40,101.2 | 84.9 | $9,151.4 | $31,954.3 | $41,105.8 | 78.9 |
| | OARM Cincinnati Office | $9,720.4 | $20,623.6 | $30,344.0 | 76.7 | $9,686.5 | $17,102.9 | $26,789.4 | 70.5 |
| | Regional Resources | $52,361.1 | $40,348.8 | $92,709.9 | 358.2 | $43,273.5 | $37,007.9 | $80,281.4 | 267.0 |
| | **TOTAL** | **$163,435.0** | **$458,514.0** | **$621,949.0** | **1,078.3** | **$144,264.0** | **$451,512.0** | **$595,776.0** | **859.2** |

** The Total Agency Resources do not include increases specified in the FY 2019 Budget Addendum.*

| | | FY 2018 Annualized Continuing Resolution | | | | FY 2019 President's Budget | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NPM** | **Major Office** | **Pay ($K)** | **Non-Pay ($K)** | **Total ($K)** | **FTE** | **Pay ($K)** | **Non-Pay ($K)** | **Total ($K)** | **FTE** |
| **OCFO** | Immediate Office | $1,557.9 | $2,219.1 | $3,777.0 | 11.4 | $1,744.8 | $541.4 | $2,286.1 | 11.4 |
| | Office of Budget | $5,876.1 | $2,844.1 | $8,720.2 | 43.0 | $5,815.8 | $1,740.3 | $7,556.1 | 38.0 |
| | Office of Planning, Analysis and Accountability | $3,416.4 | $538.2 | $3,954.6 | 25.0 | $3,290.5 | $348.7 | $3,639.2 | 21.5 |
| | Office of Technology Solutions | $5,876.1 | $23,182.8 | $29,058.8 | 43.0 | $6,045.3 | $27,230.3 | $33,275.6 | 39.5 |
| | Office of Resource and Information Management | $1,639.8 | $1,544.5 | $3,184.3 | 12.0 | $1,377.4 | $839.2 | $2,216.6 | 9.0 |
| | Office of the Controller | $22,916.8 | $2,202.1 | $25,118.9 | 167.7 | $18,426.9 | $1,982.7 | $20,409.6 | 120.4 |
| | OCFO eEnterprise | $669.1 | $298.4 | $967.5 | 4.0 | $708.1 | $299.9 | $1,007.9 | 3.5 |
| | Regional Resources | $28,104.9 | $1,691.8 | $29,796.7 | 215.7 | $24,324.3 | $1,237.6 | $25,561.9 | 168.2 |
| | **TOTAL** | **$70,057.0** | **$34,521.0** | **$104,578.0** | **521.8** | **$61,733.0** | **$34,220.0** | **$95,953.0** | **411.5** |
| | | | | | | | | | |
| **OCSPP** | Immediate Office | $5,752.0 | $2,065.7 | $7,817.7 | 35.8 | $5,715.8 | $771.8 | $6,487.6 | 30.5 |
| | Office of Pesticide Programs | $75,291.9 | $14,934.0 | $90,225.9 | 490.9 | $67,232.7 | $3,148.7 | $70,381.4 | 410.9 |
| | Office of Pollution Prevention and Toxics | $48,889.4 | $30,344.2 | $79,233.6 | 311.1 | $31,153.2 | $29,833.5 | $60,986.6 | 192.7 |
| | Office of Science Coordination and Policy | $2,847.0 | $6,477.3 | $9,324.3 | 19.0 | $862.1 | $13.1 | $875.2 | 4.9 |
| | Regional Resources | $20,763.7 | $31,120.8 | $51,884.5 | 154.2 | $11,142.2 | $8,233.9 | $19,376.2 | 75.7 |
| | **TOTAL** | **$153,544.0** | **$84,942.0** | **$238,486.0** | **1,011.0** | **$116,106.0** | **$42,001.0** | **$158,107.0** | **714.7** |
| | | | | | | | | | |
| **OECA** | Immediate Office | $7,761.9 | $2,112.9 | $9,874.8 | 48.8 | $6,362.1 | $1,381.2 | $7,743.2 | 36.3 |
| | Office of Civil Enforcement | $22,697.3 | $4,193.6 | $26,890.9 | 128.9 | $18,933.8 | $4,402.6 | $23,336.4 | 98.9 |
| | Office of Criminal Enforcement, Forensics, and Training | $57,660.0 | $7,327.2 | $64,987.2 | 330.5 | $47,898.0 | $9,738.7 | $57,636.6 | 240.1 |
| | Office of Compliance | $20,870.9 | $15,393.0 | $36,263.9 | 132.0 | $18,291.5 | $27,540.6 | $45,832.1 | 103.8 |
| | Office of Environmental Justice | $3,050.3 | $1,690.7 | $4,741.1 | 21.0 | $0.0 | $0.0 | $0.0 | - |
| | Office of Federal Activities | $3,983.0 | $825.2 | $4,808.3 | 23.6 | $0.0 | $0.0 | $0.0 | - |
| | Federal Facilities Enforcement Office | $2,358.8 | $627.7 | $2,986.5 | 14.7 | $1,659.8 | $564.6 | $2,224.4 | 10.0 |
| | Office of Site Remediation Enforcement | $11,400.7 | $27,271.4 | $38,672.1 | 68.8 | $8,085.3 | $12,891.2 | $20,976.4 | 42.9 |
| | Regional Resources | $310,471.0 | $42,908.2 | $353,379.2 | 2,118.4 | $238,625.6 | $14,142.3 | $252,767.9 | 1,509.7 |
| | **TOTAL** | **$440,254.0** | **$102,350.0** | **$542,604.0** | **2,886.7** | **$339,856.0** | **$70,661.0** | **$410,517.0** | **2,041.7** |
| | | | | | | | | | |
| **OEI** | Office of the Chief Information Officer | $2,533.1 | $4,218.5 | $6,751.6 | 16.1 | $2,793.6 | $1,422.5 | $4,216.1 | 12.8 |
| | Office of Business Operations & Services | $6,149.2 | $2,119.8 | $8,269.0 | 38.4 | $5,179.3 | $2,028.4 | $7,207.7 | 31.8 |
| | Office of Digital Services & Technical Architecture | $4,349.1 | $2,621.1 | $6,970.2 | 26.9 | $3,943.6 | $1,730.5 | $5,674.1 | 21.7 |
| | Office of Enterprise Information Programs | $7,307.4 | $7,508.7 | $14,816.1 | 48.0 | $6,628.5 | $5,767.3 | $12,395.8 | 38.4 |
| | Office of Information Management | $10,711.9 | $34,068.4 | $44,780.3 | 64.8 | $10,246.8 | $20,870.4 | $31,117.2 | 56.5 |
| | Office of Customer Advocacy, Policy & Portfolio Management | $6,067.9 | $3,167.6 | $9,235.6 | 36.7 | $5,059.5 | $2,179.9 | $7,239.4 | 29.9 |
| | Office of Information Security & Privacy | $2,557.1 | $5,865.1 | $8,422.2 | 15.3 | $2,258.8 | $17,178.6 | $19,437.5 | 13.9 |
| | Office of Information Technology Operations | $847.4 | $3,664.9 | $4,512.3 | 4.6 | $1,845.9 | $2,501.0 | $4,346.9 | 10.0 |
| | Regional Resources | $22,164.9 | $17,074.9 | $39,239.8 | 153.4 | $19,120.0 | $12,054.3 | $31,174.3 | 126.2 |
| | **TOTAL** | **$62,688.0** | **$80,309.0** | **$142,997.0** | **404.2** | **$57,076.0** | **$65,733.0** | **$122,809.0** | **341.2** |

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| | | FY 2018 Annualized Continuing Resolution | | | | FY 2019 President's Budget | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NPM** | **Major Office** | **Pay ($K)** | **Non-Pay ($K)** | **Total ($K)** | **FTE** | **Pay ($K)** | **Non-Pay ($K)** | **Total ($K)** | **FTE** |
| **OGC** | Immediate Office | $2,316.9 | $30.0 | $2,346.9 | 12.8 | $1,603.6 | $46.0 | $1,649.6 | 8.7 |
| | Air and Radiation Law Office | $9,255.5 | $7.0 | $9,262.5 | 50.3 | $6,267.7 | $17.0 | $6,284.7 | 33.8 |
| | Pesticides and Toxic Substances Law Office | $3,755.7 | $6.0 | $3,761.7 | 20.4 | $3,282.5 | $16.0 | $3,298.5 | 17.7 |
| | Solid Waste and Emergency Response Law Office | $2,557.2 | $25.0 | $2,582.2 | 13.7 | $1,966.3 | $25.0 | $1,991.3 | 10.4 |
| | Water Law Office | $3,683.6 | $10.0 | $3,693.6 | 20.0 | $3,227.3 | $10.0 | $3,237.3 | 17.4 |
| | Civil Rights - Title VI | $1,797.2 | $187.1 | $1,984.3 | 12.0 | $1,488.0 | $300.0 | $1,788.0 | 9.0 |
| | Other Legal Support | $15,924.8 | $1,559.6 | $17,484.4 | 100.6 | $16,472.0 | $2,195.0 | $18,667.0 | 96.0 |
| | Regional Resources | $27,538.2 | $768.3 | $28,306.5 | 158.0 | $23,787.6 | $953.0 | $24,740.6 | 118.4 |
| | **TOTAL** | **$66,829.0** | **$2,593.0** | **$69,422.0** | **387.8** | **$58,095.0** | **$3,562.0** | **$61,657.0** | **311.4** |
| | | | | | | | | | |
| **OIG** | Immediate Office | $827.1 | $50.0 | $877.1 | 4.4 | $647.7 | $157.0 | $804.7 | 3.0 |
| | Office of Audit | $12,953.2 | $789.4 | $13,742.6 | 92.3 | $10,143.5 | $588.6 | $10,732.1 | 61.9 |
| | Office of Congressional, Public Affairs and Management | $3,051.0 | $174.8 | $3,225.8 | 19.1 | $2,389.2 | $65.1 | $2,454.3 | 12.8 |
| | Office of Chief of Staff | $6,583.9 | $500.3 | $7,084.2 | 43.4 | $5,155.8 | $1,932.0 | $7,087.8 | 29.1 |
| | Office of Investigations | $10,887.4 | $711.9 | $11,599.3 | 66.6 | $8,525.8 | $1,279.5 | $9,805.3 | 44.7 |
| | Office of Program Evaluation | $12,624.4 | $771.6 | $13,396.0 | 92.3 | $9,886.0 | $611.8 | $10,497.8 | 61.9 |
| | **TOTAL** | **$46,927.0** | **$2,998.0** | **$49,925.0** | **318.1** | **$36,748.0** | **$4,634.0** | **$41,382.0** | **213.4** |
| | | | | | | | | | |
| **OITA** | Immediate Office | $1,107.1 | $46.3 | $1,153.4 | 6.0 | $377.7 | $46.3 | $423.9 | 2.0 |
| | Office of Regional and Bilateral Affairs | $3,457.7 | $2,796.3 | $6,254.0 | 23.7 | $907.9 | $1,086.1 | $1,994.1 | 5.0 |
| | Office of Global Affairs and Policy | $2,880.4 | $304.0 | $3,184.4 | 18.6 | $907.9 | $85.5 | $993.4 | 5.0 |
| | Office of Management and International Services | $1,807.4 | $912.0 | $2,719.4 | 13.0 | $730.8 | $623.5 | $1,354.3 | 4.0 |
| | American Indian Environmental Office | $2,931.3 | $730.8 | $3,662.1 | 19.0 | $2,574.4 | $1,149.6 | $3,749.1 | 14.3 |
| | Regional Resources | $11,311.1 | $66,489.6 | $77,800.7 | 78.5 | $8,741.2 | $44,589.0 | $53,305.2 | 55.9 |
| | **TOTAL** | **$23,495.0** | **$71,279.0** | **$94,774.0** | **158.8** | **$14,240.0** | **$47,580.0** | **$61,820.0** | **86.2** |
| | | | | | | | | | |
| **OLEM** | Immediate Office | $7,770.8 | $4,981.4 | $12,752.2 | 45.2 | $10,138.9 | $3,561.3 | $13,700.2 | 29.2 |
| | Federal Facilities Restoration and Reuse Office | $2,198.2 | $805.2 | $3,003.4 | 13.2 | $2,204.0 | $799.3 | $3,003.3 | 12.5 |
| | Office of Communication, Partnership, and Analysis | $2,467.5 | $1,504.4 | $3,971.9 | 15.3 | $1,958.7 | $998.4 | $2,957.1 | 10.7 |
| | Office of Superfund Remediation and Technology Innovation | $24,542.5 | $69,023.5 | $93,566.0 | 147.0 | $22,520.9 | $36,023.3 | $58,544.2 | 132.0 |
| | Office of Resource Conservation and Recovery | $25,697.7 | $10,526.0 | $36,223.6 | 166.9 | $15,715.5 | $6,588.4 | $22,304.0 | 95.5 |
| | Office of Underground Storage Tanks | $4,161.2 | $2,692.8 | $6,853.9 | 25.5 | $2,899.0 | $261.1 | $3,160.1 | 16.3 |
| | Office of Brownfields and Land Revitalization | $3,082.1 | $12,306.5 | $15,388.6 | 19.5 | $2,120.9 | $11,129.1 | $13,250.0 | 12.1 |
| | Office of Emergency Management | $11,932.9 | $28,693.1 | $40,626.0 | 70.1 | $9,867.5 | $22,336.2 | $32,203.8 | 55.1 |
| | Regional Resources | $264,479.2 | $755,706.2 | $1,020,185.4 | 1,814.8 | $224,299.5 | $457,860.9 | $682,160.4 | 1,472.1 |
| | **TOTAL** | **$346,332.0** | **$886,239.0** | **$1,232,571.0** | **2,317.5** | **$291,725.0** | **$539,558.0** | **$831,283.0** | **1,835.5** |

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| | | FY 2018 Annualized Continuing Resolution | | | | FY 2019 President's Budget | | | |
|---|---|---|---|---|---|---|---|---|---|
| NPM | Major Office | Pay ($K) | Non-Pay ($K) | Total ($K) | FTE | Pay ($K) | Non-Pay ($K) | Total ($K) | FTE |
| ORD | ORD Headquarters | $48,553.8 | $55,515.0 | $104,068.8 | 310.3 | $33,276.4 | $40,168.0 | $73,444.4 | 203.4 |
| | National Center for Environmental Research | $8,445.6 | $42,132.7 | $50,578.3 | 52.7 | $638.5 | $1,909.0 | $2,547.5 | 3.9 |
| | National Exposure Research Laboratory | $48,809.9 | $30,772.5 | $79,582.4 | 310.8 | $33,581.2 | $11,198.0 | $44,779.2 | 205.4 |
| | National Health and Environmental Effects Research Laboratory | $67,699.0 | $48,246.9 | $115,945.9 | 473.7 | $52,198.9 | $18,870.0 | $71,068.9 | 319.0 |
| | National Homeland Security Research Center | $7,175.1 | $10,267.5 | $17,442.6 | 43.7 | $4,408.3 | $3,720.0 | $8,128.3 | 27.0 |
| | National Risk Management Research Laboratory | $40,602.4 | $26,450.7 | $67,053.1 | 278.0 | $29,332.0 | $10,359.0 | $39,691.0 | 179.6 |
| | Office of the Science Advisor | $3,345.4 | $3,508.7 | $6,854.2 | 18.0 | $2,078.6 | $1,226.0 | $3,304.6 | 12.7 |
| | National Center for Computational Toxicology | $5,306.3 | $9,042.5 | $14,348.7 | 35.5 | $4,368.0 | $2,505.0 | $6,873.0 | 24.7 |
| | National Center for Environmental Assessment | $26,928.5 | $12,276.5 | $39,205.0 | 181.2 | $16,605.2 | $3,020.0 | $19,625.2 | 99.3 |
| | **TOTAL** | **$256,866.0** | **$238,213.0** | **$495,079.0** | **1,703.9** | **$176,487.0** | **$92,975.0** | **$269,462.0** | **1,075.0** |
| | | | | | | | | | |
| OW | Immediate Office | $10,854.1 | $5,721.6 | $16,575.7 | 66.0 | $10,144.2 | $3,688.3 | $13,832.6 | 59.1 |
| | Office of Ground Water and Drinking Water | $26,112.0 | $37,032.4 | $63,144.4 | 166.0 | $23,936.3 | $18,977.7 | $42,914.0 | 146.8 |
| | Office of Science and Technology | $17,915.9 | $15,923.5 | $33,839.4 | 113.3 | $17,468.5 | $9,505.9 | $26,974.4 | 101.5 |
| | Office of Wastewater Management | $18,810.9 | $27,842.8 | $46,653.7 | 123.0 | $19,738.0 | $24,707.3 | $44,445.3 | 115.6 |
| | Office of Wetlands, Oceans and Watersheds | $18,258.3 | $22,481.3 | $40,739.6 | 114.1 | $12,691.1 | $36,484.3 | $49,175.4 | 73.2 |
| | Regional Resources | $190,646.8 | $3,239,187.5 | $3,429,834.4 | 1,343.4 | $156,840.9 | $2,140,456.4 | $2,297,297.3 | 1,039.3 |
| | **TOTAL** | **$282,598.0** | **$3,348,189.0** | **$3,630,787.0** | **1,925.8** | **$240,819.0** | **$2,233,820.0** | **$2,474,639.0** | **1,535.5** |
| | | | | | | | | | |
| | **Subtotal Agency Resources** | **$2,257,045.0** | **$5,839,452.0** | **$8,096,497.0** | **15,042.8** | **$1,812,997.0** | **$3,829,463.0** | **$5,642,460.0** | **11,113.2** |
| | Less Rescission of Prior Year Funds | | | ($90,348.0) | | | | ($220,460.0) | |
| | Reimbursable FTE | | | | 365.3 | | | | 587.6 |
| | **Total Agency Resources** | **$2,257,045.0** | **$5,839,452.0** | **$8,006,149.0** | **15,408.1** | **$1,812,997.0** | **$3,829,463.0** | **$5,422,000.0** | **11,700.8** |

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## U.S. Environmental Protection Agency

## Reform Plan

EPA's reform plan represents a series of projects that EPA will complete to implement the goals of Executive Order 13781: *Comprehensive Plan for Reorganizing the Executive Branch*. The deployment of a Lean Management System will serve as the foundation for EPA's reforms, allowing us to manage all of our programs more effectively. The Administrator's focus on cooperative federalism is core to our reform agenda. We will focus on our relationship with states and tribes, empowering them to deliver environmental protection more efficiently, by tailoring our oversight activities, providing additional flexibility in how they spend funds, and reviewing permits and State Implementation Plans more quickly. We also will focus on providing better service to our external customers (by streamlining permitting processes, reducing mandatory reporting burden, aligning our infrastructure investments, and responding to Freedom of Information Act requests in timely manner), as well as our internal customers (by speeding up procurement). Our plan also examines the Agency's physical footprint and proposes ways to realize cost savings. While we did not project savings (or upfront costs) from these reforms in our FY 2019 President's Budget, we do expect to include these impacts in future submissions, once our plans are finalized.

### Deploying a Lean Management System

EPA will deploy a Lean Management System (LMS) that is designed to routinely monitor, evaluate, and assess our general operations and ensure progress in meeting our reform agenda objectives. Successful implementation of the LMS will improve the paradigm for how EPA responds to performance issues that commonly impact our ability to meet strategic goals, objectives, and expectations. EPA will revamp our performance measures to ensure they reflect value to the American People, stakeholders, and customers. The key elements of the LMS include developing cascading performance measures, instituting monthly and quarterly performance reviews, and establishing a culture of continuous improvement. This concept naturally creates transparency and accountability at all levels of the Agency.

### Speeding up Environmental Permitting

For many stakeholders, EPA and States take longer than is actually necessary to issue environmental permits, even when EPA is meeting statutory or regulatory deadlines. EPA will improve the efficiency and effectiveness of federal permitting programs through several mechanisms, which include conducting targeted Lean business process improvement events on EPA-issued permit processes and implementing the results of those events. As part of this process, EPA will collect system-wide data on permit status, backlog and throughput. Following the Lean events, EPA will target and track improvements in permitting processes by gathering, analyzing and using agencywide data to track results and collect best practices. In addition, EPA will systematically review and amend any internal policies and procedures related to permitting that could be streamlined, as appropriate, to further improve the efficiency and effectiveness of federal permitting programs.

**Reducing Unnecessary Industry Reporting Burdens**

The intent of a reform effort on reporting and record keeping burden is to provide greater awareness of the paperwork burden we place on regulated entities, develop a process for managing that burden for continuous improvement, and reducing burden where possible. A positive trend would be reduction in EPA's overall Information Collection Request (ICR) burden. This effort will review and analyze our current process for developing and renewing ICRs as well as conducting Lean events around specific ICRs to determine burden reduction opportunities and how to accomplish them.

**Maximizing Infrastructure Investments**

EPA lacks a process for identifying opportunities to link its various infrastructure and community assistance program resources to spur similar, non-Agency investments with the goal of enhancing the collective impact those resources have in communities where current infrastructure funding levels are insufficient to address deficiencies adversely impacting human health, environmental protection, and economic development. EPA needs to reimagine EPA infrastructure and community assistance programs (e.g., the Clean Water State Revolving Fund, Drinking Water State Revolving Fund, Water Infrastructure Finance and Innovation Act, Environmental Justice, Community Revitalization, and Brownfields Area-Wide Planning grant programs) to better align EPA investments with each other and with other investments in pursuit of economic revitalization and improved environmental outcomes. In doing so, EPA must determine how best to serve disadvantaged communities, maximize leveraging of private investment to improve the economy, and protect public health and the environment.

**Examining EPA Field Presence**

The Agency has many different organizational and locational field presence models that are currently in place. For example, some regions have smaller field offices in close proximity to its stakeholders and customers along with the main regional offices, while others work mainly out of a single regional office. Some are organized by environmental media (.e.g, land, air, and water), while others are organized by lines of business. Some functions currently performed in regional offices benefit from close proximity to customers or a particular geographic location, while others could be performed as successfully or more efficiently centrally. Our mission support programs also have satellite sites in several locations across the country. Understanding why offices are where they are, what functions they perform, and how they are organized, will help the Agency make informed decisions about the most effective models to deliver and support its mission and better support our stakeholders and customers.

**Tailoring State Oversight**

The EPA recognizes the need to improve the EPA/state relationship to make the best use of limited EPA/state resources. This involves being more strategic about when and how state oversight activities are conducted. Together with its stakeholders, the EPA is undertaking an effort to develop a comprehensive system designed to evaluate state and local implementation of federal environmental programs. The intent is to help states maintain strong performance and ensure a level playing field, by using a systematic method to evaluate state environmental programs which will include, allocating resources effectively and targeting assistance where needed while adding value to the States as the customer of the oversight function. The effort involves understanding

current practices, and engaging stakeholders, followed by defining and launching a revised oversight approach.

**Improving Management of EPA Laboratories**

There are several drivers for managing and operating EPA's laboratory enterprise in a more strategic, corporate, and efficient manner, including recent reports by the Government Accountability Office and the National Academy of Sciences. While EPA has recognized these drivers, our efforts to date have not been transformational. The current EPA laboratory enterprise is operated as distinct Regional, Program, and Research laboratories, which, in FY 2016, included 30 laboratory facilities that occupied 3.4 million total square feet and employed over 4,000 federal and non-federal staff at an annual cost of $658 million. This project starts with the identification and implementation of an enterprise-wide framework to manage laboratory capabilities and capacity to meet the scientific demands associated with achieving the Agency's mission. Institution of this framework will increase the efficiency and effectiveness of Agency laboratory operations and break down corporate barriers to provide a more resilient and agile laboratory infrastructure that will position the Agency to be responsive to a wide variety scientific and technical needs, while also responding to the realities of operating at reduced resource levels.

**Enhancing Human Resources (HR) Shared Services Centers**

EPA delivers HR support to its workforce through a variety of organizations and support models, both centralized, through three HR Shared Service Centers, and decentralized, with HR resources embedded in organizations. In order to provide the most cost-effective service to employees and managers, EPA will examine our HR service model to determine if efficiency can be obtained through realigning organizations, streamlining management layers and examining the facility footprint. The goal would be to improve customer service, provide more consistent HR advice, and foster increased confidence from customers.

**Speeding Up the EPA Acquisition Process**

Annually, EPA spends nearly $1.5 billion and processes an average of 15,000 procurement actions on contracts to deliver our mission and program objectives. In FY 2016, EPA identified acquisition management as an Agency enterprise risk because the process to award contracts was negatively impacted and slowed by insufficient planning, backlog of work, and absence of experienced staff. For example, there is no consistent agencywide look at the acquisition planning process and no mechanism to measure how long this process takes from the identification of the customer's need to the development and submission of a finished procurement request package. Additionally, multiple contracts have historically been issued for the same services, creating unnecessary work. To most effectively acquire the supplies and services needed to meet our mission objectives, EPA needs to analyze and improve our systems and processes and the organizational alignment of the acquisition function.

**Eliminate the State Implementation Plan (SIP) Backlog**

The State Implementation Plan project seeks to identify and implement process improvements that will enable EPA to routinely take action on SIPs for meeting National Ambient Air Quality Standards within the Clean Air Act deadline of 18 months, and to eliminate the current backlog of SIP actions. Over 200 SIPs are submitted to EPA for approval each year. There is currently a backlog of over 350 SIPs, despite robust efforts that have reduced the backlog by 49 percent in recent years. Improving the timeliness of EPA's process for taking actions on SIPs will reduce the risk of deadline suits that impact the Agency's ability to prioritize actions consistent with the needs of state partners and air quality improvement goals. This effort will consider the need to make progress on both new and backlogged SIPs, as well as variability in the number and complexity of SIP actions across the country, among other factors.

**Speeding Up Freedom of Information Act (FOIA) Responses**

Under EPA's decentralized approach for processing Freedom of Information Act (FOIA) requests, offices implement EPA FOIA procedures in different ways. This adds a layer of complexity to many of the requests EPA currently receives. For instance, in the past several years the number of FOIA requests that involve more than one office or region has increased significantly. Or a requester makes the identical or similar requests to multiple regions or offices. Such requests require coordination among offices to ensure consistency. At the same time, the complexity and volume of documents required to be searched for, collected and reviewed has multiplied dramatically. The Agency's current decentralized approach for processing FOIA requests puts a significant burden on Agency staff. Furthermore, the decentralized approach contributes to a lack of consistency in record searches, final responses, and metrics, which are reported to the Department of Justice. To address these and other challenges, EPA staff are evaluating the Agency's approach for processing FOIA requests and will implement agencywide changes. The goal of these changes will be to improve compliance with statutory requirements, reduce the overall burden to EPA staff for processing FOIA requests, improve the consistency of responses, and increase public satisfaction with the EPA FOIA process; thereby, reducing the Agency's exposure to appeals and lawsuits under FOIA.

**Increasing Flexibility in State and Tribal Assistance**

EPA, states, and tribes are not getting the full efficiency and effectiveness benefits inherent in Performance Partnership Grants (PPG) as evidenced by the FY2017 utilization rates of 49.8 percent (states) and 55.4 percent (tribes) of eligible categorical grant funds managed through PPGs. The PPG program allows states and tribes who receive multiple grants from EPA to combine funding from 20 eligible categorical grants into one multi-program grant with a single budget, utilize flexibilities, direct resources to the highest needs, and shift work across programs, all with reduced reporting requirements and administrative burdens. Through outreach and coordination with states, tribes, and internal customers, EPA will identify barriers and improvements to PPG utilization and flexibilities. Possible improvements include rigorous evaluation of and changes to program requirements and implementation, policy-level changes, and training on the duality of PPG flexibility and accountability.

## Seeking Organizational Efficiencies

Although not a formal Reform Plan project as part of Executive Order 13781, the Agency is continuing to review its organizational structure to identify efficiencies and to optimize effort in priority areas. In addition, some Reform efforts involve organizational adjustments to better support the priority work. These ongoing efforts will continue in tandem with other process and program restructuring to focus on core business functions, consolidate and streamline functions, and also potentially to fill gaps that are identified through the implementation of the Lean Management System. Both small reorganizations and larger ones will result, along with informal internal realignments. There is a nexus with some Reform projects but these efforts are not expected to impact resources significantly and do not impact the budget structure presented for FY 2019.

Several reorganizations were initiated or proposed in FY 2018:

- Consolidating the FOIA policy and procedural staff with the legal oversight staff is expected to increase the effectiveness and visibility of the Agency's FOIA program.
- Consolidating NEPA work into the Office of Policy, which will support our commitment to streamline the permitting processes by ensuring the ability to quickly elevate and resolve issues which will help expedite reviews and approvals.
- The Agency's transboundary waste program will consolidate into the larger RCRA program, creating programmatic efficiencies.
- Shifting Environmental Justice work to the Office of Policy will raise the profile and allow for better coordination across Agency programs as well as with federal partners to ensure community needs are reflected in our actions and investments.
- Combining the Office of Environmental Information with the Office of Administration and Resources Management is a larger effort which will create efficiencies through housing much of the infrastructure support for the agency in one entity.