United States
Environmental Protection Agency

FISCAL YEAR 2022

Justification of Appropriation Estimates for the Committee on Appropriations

Tab 07: Hazardous Substance Superfund

EPA-190-R-21-002

May 2021
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Environmental Protection Agency
FY 2022 Annual Performance Plan and Congressional Justification

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Environmental Protection Agency
FY 2022 Annual Performance Plan and Congressional Justification

APPROPRIATION: Hazardous Substance Superfund
Resource Summary Table

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Hazardous Substance Superfund				
Budget Authority	$1,280,955.8	$1,205,811.0	$1,533,814.0	$328,003.0
Total Workyears	2,638.5	2,636.5	2,671.7	35.2

*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), and hire, maintenance, and operation of aircraft, $1,533,814,000, to remain available until expended, consisting of such sums as are available in the Trust Fund on September 30, 2021, as authorized by section 517(a) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and up to $1,533,814,000 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, $11,800,000 shall be paid to the "Office of Inspector General" appropriation to remain available until September 30, 2023, and $30,985,000 shall be paid to the "Science and Technology" appropriation to remain available until September 30, 2023.

Program Projects in Superfund

(Dollars in Thousands)

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Indoor Air and Radiation				
Radiation: Protection	$2,323.3	$1,985.0	$2,612.0	$627.0
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$10,498.1	$11,586.0	$11,800.0	$214.0
Compliance				
Compliance Monitoring	$1,054.3	$1,000.0	$1,006.0	$6.0
Enforcement				
Criminal Enforcement	$7,292.3	$7,647.0	$7,786.0	$139.0
Environmental Justice	$566.3	$826.0	$5,841.0	$5,015.0

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Forensics Support	$1,257.6	$1,145.0	$1,164.0	$19.0
Superfund: Enforcement	$179,284.5	$156,773.0	$159,542.0	$2,769.0
Superfund: Federal Facilities Enforcement	$7,155.8	$7,424.0	$7,574.0	$150.0
Subtotal, Enforcement	$195,556.5	$173,815.0	$181,907.0	$8,092.0
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	$32,992.9	$33,020.0	$33,264.0	$244.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$994.6	$1,030.0	$1,030.0	$0.0
Subtotal, Homeland Security	$33,987.5	$34,050.0	$34,294.0	$244.0
Information Exchange / Outreach				
Exchange Network	$1,341.2	$1,328.0	$1,328.0	$0.0
IT / Data Management / Security				
Information Security	$927.6	$659.0	$5,659.0	$5,000.0
IT / Data Management	$15,168.6	$13,826.0	$15,202.0	$1,376.0
Subtotal, IT / Data Management / Security	$16,096.2	$14,485.0	$20,861.0	$6,376.0
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	$1,014.2	$832.0	$857.0	$25.0
Legal Advice: Environmental Program	$628.3	$443.0	$450.0	$7.0
Subtotal, Legal / Science / Regulatory / Economic Review	$1,642.5	$1,275.0	$1,307.0	$32.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$24,772.5	$26,561.0	$27,720.0	$1,159.0
Facilities Infrastructure and Operations	$82,734.0	$68,727.0	$72,801.0	$4,074.0
Acquisition Management	$24,356.1	$23,800.0	$30,519.0	$6,719.0
Human Resources Management	$6,094.4	$6,202.0	$6,842.0	$640.0
Financial Assistance Grants / IAG Management	$3,561.3	$3,210.0	$3,390.0	$180.0
Subtotal, Operations and Administration	$141,518.3	$128,500.0	$141,272.0	$12,772.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$15,501.1	$16,463.0	$16,634.0	$171.0
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$3,882.1	$12,824.0	$12,876.0	$52.0
Research: Chemical Safety for Sustainability	$4,115.6	$0.0	$0.0	$0.0
Subtotal, Research: Chemical Safety for Sustainability	$7,997.7	$12,824.0	$12,876.0	$52.0
Superfund Cleanup				

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Superfund: Emergency Response and Removal	$203,758.9	$190,000.0	$195,489.0	$5,489.0
Superfund: EPA Emergency Preparedness	$8,824.2	$7,700.0	$7,839.0	$139.0
Superfund: Federal Facilities	$23,280.8	$21,800.0	$22,189.0	$389.0
Superfund: Remedial	$617,575.2	$589,000.0	$882,400.0	$293,400.0
Subtotal, Superfund Cleanup	$853,439.1	$808,500.0	$1,107,917.0	$299,417.0
TOTAL Superfund	**$1,280,955.8**	**$1,205,811.0**	**$1,533,814.0**	**$328,003.0**

*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 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$8,912.4	$7,661.0	$10,342.0	$2,681.0
Science & Technology	$1,795.6	$1,735.0	$2,340.0	$605.0
Hazardous Substance Superfund	***$2,323.3***	***$1,985.0***	***$2,612.0***	***$627.0***
Total Budget Authority	$13,031.3	$11,381.0	$15,294.0	$3,913.0
Total Workyears	56.4	53.8	66.7	12.9

Program Project Description:

This Program addresses potential radiation risks that may be found at 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 2022 Activities and Performance Plan:

Work in this program directly supports protecting communities from hazardous waste and environmental damage. In FY 2022, 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 hazardous waste sites.

NAREL and NCRFO provide data evaluation and assessment, document review, and field support through ongoing fixed and mobile analytical capability. Thousands of radiochemical analyses are performed annually at NAREL on a variety of samples from contaminated sites. NAREL is EPA's only radiological laboratory with in-house radiochemical analytical capability. NCRFO provides field-based technical support for screening and identifying radiological contaminants at Superfund and non-Superfund sites across the country, including air sampling equipment and expert personnel.

More specifically, these organizations focus on providing technical support and high-quality data to support agency decisions at sites across the country. They also develop guidance for cleaning up Superfund and other sites that are contaminated with radioactive materials.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$34.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-$81.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities costs.
- (+$674.0 / +2.4 FTE) This program change increases program capacity for activities such as analytical and field support to manage and mitigate radioactive releases and exposures along with data evaluation and assessment, document review, and field support through ongoing fixed and mobile analytical capabilities. This investment includes $387.0 thousand in payroll costs.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Audits, Evaluations, and Investigations

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Inspector General	$43,076.0	$43,500.0	$54,347.0	$10,847.0
Hazardous Substance Superfund	***$10,498.1***	***$11,586.0***	***$11,800.0***	***$214.0***
Total Budget Authority	$53,574.1	$55,086.0	$66,147.0	$11,061.0
Total Workyears	268.4	270.0	301.0	31.0

Program Project Description:

EPA's Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency's budget. The vision of the OIG is to be a premier oversight organization trusted to speak the truth, promote good governance, and contribute to improved human health and the environment. This vision is met through the mission of the OIG. The OIG conducts and supervises independent audits, evaluations, and investigations while reviewing existing and proposed legislation and regulations relating to the programs and operations of the Agency; provides leadership and coordination; makes evidence-based policy recommendations for activities designed to promote economy, efficiency and effectiveness; and works to prevent and detect waste, fraud, and abuse in Agency, grantee, and contractor operations of EPA's Superfund Program.

The OIG activities add value and enhance public trust and safety by keeping the head of the Agency and Congress fully and immediately informed of problems and deficiencies, and the necessity for and progress of corrective actions. 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.[1] The audit, evaluation, 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. EPA's OIG plans its work with a focus on identifying and influencing resolution of the Agency's major Management Challenges.

FY 2022 Activities and Performance Plan:

The activities of the OIG are supported through the core value to be the best in public service through customer service, integrity, and accountability. The summary of this value is to contribute to improved EPA Superfund and other cleanup programs and operations protecting human health

[1] For more information, please see: https://www.epa.gov/office-inspector-general/epa-oig-organization-profile.

and the environment, and enhancing safety; conduct audits, evaluations, and investigations that enable EPA to improve business practices and accountability to meet stakeholders' needs. The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws 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 resulting in cleaner air, land, and water, and ensured chemical safety for America. In FY 2022, the OIG will: target initiatives supporting EPA's six National Compliance Initiatives; focus on EPA Management Challenges; increase its agility to assess emerging environmental threats; increase its use of data analytics, business analytics, and business intelligence to better target resources to address high risk, high vulnerability areas of interest; employ best practices in support of improving efficiency, effectiveness, accountability, and monetary benefits; focus on measurable impact and increase its return on investment to the American public regarding issues related to the Superfund Program.

The OIG carries out its statutory mission by conducting many types of audits, evaluations, and investigations for EPA. Plans are implemented through audits, evaluations, investigations, and follow-up reviews in compliance with the Inspector General Act (as amended), the Generally Accepted Government Accounting Standards, and the Council of Inspectors General on Integrity and Efficiency's *Quality Standards for Federal Offices of Inspector General*.

The 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 audits and 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 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 creates 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 may lead to prosecution and civil judgments wherein there is a recovery and repayment of financial losses. The major areas of investigative focus include: fraudulent practices, program integrity, laboratory fraud, serious employee misconduct, and cyber-crimes.

EPA's OIG continues to balance its workload with the capacity of a reduced workforce, while meeting statutorily mandated requirements and delivering a strong return on investment. Based on prior work, Agency challenges, cross-agency risk assessment, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2022:

Audits and Evaluations

The OIG Office of Audit and Office of Evaluation conduct assignments related to Superfund and other land issues. The Office of Audit is comprised of five directorates: Contracts and Assistance Agreements, Efficiency, Financial, Forensic, and Information Resources Management. The Office of Evaluation also is comprised of five directorates: Air, Environmental Research, Land Cleanup and Waste Management, Toxics, Chemical Management, and Pollution Prevention; and Water. The Offices 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 those 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.

Prior audits and evaluations of the Superfund Program have identified numerous barriers to implementing effective resource management and program improvements. Therefore, the OIG will concentrate its resources on efforts in the following assignment areas:

- EPA's Superfund institutional controls achievement of their stated goal for preventing human exposure at Superfund sites
- EPA's progress in ensuring private party Superfund liabilities are adequately covered by sufficient financial assurance mechanisms
- Superfund portion of EPA's legislatively mandated audits, such as financial statement and Federal Information Security Modernization Act to include sampling, monitoring, communication, and opportunities for cleanup efficiencies
- Survey of remedial project managers on impacts for long-term cleanup due to operational effects of COVID-19 such as: shutdown of pump and treat system, inability to monitor remedy operations, or inability to transport hazardous waste to accomplish remedial objectives
- 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 Inspector General Act identifies the Assistant Inspector General for Investigations as responsible for developing and implementing an investigative program that furthers OIG objectives. The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste, and abuse, while protecting the integrity of EPA's Superfund Program. Investigations focus on allegations of criminal activity and serious misconduct in EPA Superfund programs and operations. The OIG's investigative process is mostly reactive, and the OI performs its proactive work strategically as opportunities and resources allow. Due to the reactive nature of the OI's work, investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2018 – 2022 and in consideration of prosecutorial guidelines established by U.S. Attorneys. OIG investigations are governed by the *Attorney General Guidelines for Offices of Inspector General with Statutory Law Enforcement Authority* and by the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Investigations*, as well as other federal statutes and regulations.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA Superfund programs and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. The OI often collaborates with other law enforcement entities and external stakeholders to enhance the effectiveness of its work. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. Investigative efforts may lead to criminal convictions, administrative sanctions, civil monetary penalties, and judgments wherein there is a recovery and repayment of financial losses. In addition, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, "whose actions protect the government from doing business with entities that pose a business risk to the government."

The OIG plays a critical oversight role helping to ensure that EPA and U.S. Chemical Safety and Hazard Investigation Board (CSB) funds are properly expended and not subject to fraud, waste, or abuse. Investigative focus in this oversight include: 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) criminal conduct or serious administrative misconduct by EPA employees involved in the Superfund Program; and 5) 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.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity in the Superfund Program. 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 which may lead to better accountability and deterrence.

The OI has further reorganized its Field Operations Directorate by realigning the four field offices into two regional offices - the Eastern Region Field Office and the Western Region Field Office. The Eastern Region Field Office is responsible for matters within EPA Regions 1 through 5 while the Western Region Field Office is responsible for matters within EPA Regions 6 through 10. This realignment has improved the efficiency, effectiveness, and consistency of the OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. In addition, the OI Headquarters will hire an attorney-advisor to assist with investigative operations.

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 for the Superfund Program and other land issues 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's audits and evaluations often cover assessment of proposed and existing policies, rules, regulations, and legislation pertaining to the clean-up programs, to include Superfund, to identify vulnerability to waste, fraud, and abuse. These assessments also consider possible duplication, gaps, or conflicts with existing authority, leading to recommendations for improvements in their structure, content, and application.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$148.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$66.0) This program change is an increase to support audits, investigations, increased risk vulnerabilities to fraud, waste, and abuse, and the operations of EPA's Superfund Program.

Statutory Authority:

Inspector General Act of 1978; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 111(k).

Inspector General Reform Act:

The following information is provided pursuant to Section 6(g)(2) of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is $66.1 million ($54.3 million Inspector General; $11.8 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is $66.1 million ($54.3 million Inspector General; $11.8 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is $800 thousand ($640 thousand Inspector General; $160 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 $238 thousand ($190.4 thousand Inspector General; $47.6 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 2022".

Compliance

Compliance Monitoring
Program Area: Compliance

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$98,418.4	$102,500.0	$132,350.0	$29,850.0
Inland Oil Spill Programs	$181.4	$139.0	$2,142.0	$2,003.0
Hazardous Substance Superfund	***$1,054.3***	***$1,000.0***	***$1,006.0***	***$6.0***
Total Budget Authority	$99,654.1	$103,639.0	$135,498.0	$31,859.0
Total Workyears	433.6	453.9	459.9	6.0

Program Project Description:

The Superfund Compliance Monitoring Program supports enforcement of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or "Superfund" law. EPA's national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), provides information and tracks Superfund-related enforcement activities. Electronic tracking of Superfund enforcement work allows EPA to ensure that its enforcement resources are allocated to address the most significant concerns and facilitates transparency.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the Administration's priorities, including timely enforcement in communities with potential environmental justice concerns.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.	FY 2021 Target	FY 2022 Target
	10,000	10,000

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$6.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

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.).

Enforcement

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$50,326.2	$51,275.0	$59,121.0	$7,846.0
Hazardous Substance Superfund	***$7,292.3***	***$7,647.0***	***$7,786.0***	***$139.0***
Total Budget Authority	$57,618.5	$58,922.0	$66,907.0	$7,985.0
Total Workyears	239.8	257.7	289.7	32.0

Program Project Description:

The Criminal Enforcement Program investigates and helps prosecute criminal 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.

The Criminal Enforcement Program is strengthened by an ongoing collaboration with the Environmental Justice (EJ) Program, other EPA offices, and the U.S. Department of Justice (DOJ) to ensure our Superfund enforcement work is informed and targeted to address overburdened communities and to expand outreach opportunities through those offices.

Within the Criminal Enforcement Program, forensic scientists, attorneys, technicians, engineers, and other program experts assist Special Agents in their investigations. EPA's criminal enforcement attorneys provide legal and policy support for all 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 DOJ's Environmental Crimes Section. In FY 2020, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 95.29 percent.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will support the development of a specialized Criminal Enforcement task force within the Enforcement and Compliance Assistance Program to address Superfund-related EJ issues and casework, in partnership with the DOJ. This task force will include Special Agents and criminal justice analysts, as well as witness coordinators, to identify and provide services to victims of environmental crimes in EJ communities. The request will strengthen the Program's commitment to EJ, specifically by devoting resources toward, and more effectively target, those areas and communities that are disproportionally affected by pollution and environmental crime.

In FY 2022, EPA's Environmental Crime Victim Assistance Program will more closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's environmental justice work. Activities will include data mining and mapping to identify where EJ communities, crime victims, and public health impacts overlap. This strategy will aid EPA in identifying sources of pollution impacting these communities and to focus criminal enforcement resources on the country's most vulnerable populations and, where appropriate, use of crime victim program resources and emergency funds to assist individuals in EJ communities.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$139.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$9,482.5	$11,838.0	$293,862.0	$282,024.0
Hazardous Substance Superfund	***$566.3***	***$826.0***	***$5,841.0***	***$5,015.0***
Total Budget Authority	$10,048.8	$12,664.0	$299,703.0	$287,039.0
Total Workyears	30.2	39.9	211.9	172.0

Program Project Description:

EPA's Environmental Justice Program coordinates the Agency's efforts to address the needs of overburdened and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and working collaboratively with all stakeholders to build healthy, sustainable communities based on residents' needs and desires. The Program provides financial and technical assistance to communities working constructively and collaboratively to address environmental justice (EJ) issues. The EJ Program also works with local, state, tribal, and federal governments; community organizations and their stakeholders; business and industry; and academia to establish partnerships seeking to achieve protection from environmental and public health hazards for people of color, low-income, and indigenous communities at or near Superfund sites.

Work in this program directly supports EPA Administrator Michael Regan's message "Our Commitment to Environmental Justice" issued on April 7, 2021,[2] in addition to supporting implementation of Executive Order (EO) 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, and EO 14008, *Tackling the Climate Crisis at Home and Abroad*. In accordance with the 2018 American Water Infrastructure Act, every EPA regional office employs a dedicated EJ coordinator and the Agency maintains a list of these persons on EPA's website.[3] The Superfund portion of this program has focused on issues that affect people of color, low income, and indigenous communities at or near Superfund sites. The EJ Program complements the Agency's community outreach and other work done under the Superfund Program at affected sites.

FY 2022 Activities and Performance Plan:

EPA will continue to implement EJ activities in support of the Superfund Program. The EJ Program will continue to promote the active engagement of community groups, other federal agencies, states, tribal and local governments to recognize, support, and advance environmental protection and public health for overburdened communities at or near Superfund sites. The EJ

[2] For more information, please see: https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiatives-support-environmental-justice-and.
[3] For more information on EPA's regional office contacts, please see: https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental-justice.

Program will guide EPA's efforts to empower communities to protect themselves from environmental harms, working to utilize nationally consistent data that combines environmental and demographic indicators in mapping and targeting communities with environmental justice concerns at or near Superfund sites. These efforts help build healthy and sustainable communities through technical assistance, enabling overburdened and disadvantaged groups to participate in the new green economy while also better facilitating EPA efforts to further focus federal resources and program design to benefit environmental justice communities and those most at risk of climate change impacts from Superfund sites at or near such sites.

The EJ Program will continue to partner with other agency programs to create scientific analytical methods, a legal foundation, and public engagement practices that enable the incorporation of EJ considerations in EPA's regulatory and policy decisions while also better developing nationally consistent data that combines environmental and demographic indicators in mapping and targeting communities with environmental justice concerns at or near Superfund sites. Finally, the EJ Program will continue to support Agency's efforts to strengthen internal strategies to integrate environmental justice into our day to day activities including communications, training, performance management, and accountability measures.

Performance Measure Targets:

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$61.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$4,954.0 / +2.0 FTE) This program change increases resources to support the development and implementation of a cross-agency effort to advance environmental justice and coordinate EJ activities. This investment includes $380.0 thousand in payroll.

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).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Science & Technology	$13,726.2	$14,000.0	$14,114.0	$114.0
Hazardous Substance Superfund	***$1,257.6***	***$1,145.0***	***$1,164.0***	***$19.0***
Total Budget Authority	$14,983.8	$15,145.0	$15,278.0	$133.0
Total Workyears	57.3	68.9	68.9	0.0

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 the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory analysis 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.[4] The NEIC maintains a sophisticated chemistry and physical science laboratory, and a corps of highly trained inspectors and scientists with expertise across environmental media. The NEIC works closely with EPA's Criminal Enforcement Program to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with other EPA programs to provide technical assistance, consultation, and on-site inspection, investigation, and case resolution services in support of the Agency's Superfund Enforcement Program.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA's Superfund enforcement efforts, focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The work NEIC performs typically represents the most complex cases nationwide, requiring a level of expertise and equipment not found elsewhere in EPA, as well as support to evaluate and leverage emerging technologies. The laboratory also will continue to coordinate its support for the Agency's Superfund, Research and Development, and Land and Emergency Management Programs.

FY 2022 Activities and Performance Plan:

The Forensics Support Program provides expert scientific and technical support for EPA's Superfund enforcement efforts. Effective enforcement relies on the best available science. In FY 2022, NEIC will support the President's directive to "listen to science - and act. We must strengthen our clean air and water protections. We must hold polluters accountable for their actions. We must deliver environmental justice in communities all across America" (EO 14008,

[4] *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.

sec. 201).[5] To achieve these goals, the Agency will employ NEIC's environmental forensics expertise to investigate violations of environmental statutes and prosecute environmental crimes in communities that are disproportionally affected by pollution and environmental crime, and to target those areas more effectively.

In FY 2022, NEIC also will continue to streamline its forensics work, and identify enhancements to the Agency's sampling and analytical methods, using existing and emerging technology. The NEIC also will build on its previous progress to maximize the efficiency and effectiveness of its operations, reduce the time for completion of civil inspection reports, improve procurement processes, and continue to identify and implement further efficiencies in laboratory operations. The results of these efforts will inform EPA's work in FY 2022 and beyond.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$8.0) This program change increases core program efforts to provide analytical and scientific support for environmental forensics to ensure compliance with environmental laws.

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).

[5] For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Hazardous Substance Superfund	***$179,284.5***	***$156,773.0***	***$159,542.0***	***$2,769.0***
Total Budget Authority	$179,284.5	$156,773.0	$159,542.0	$2,769.0
Total Workyears	719.1	771.3	771.3	0.0

Program Project Description:

The Superfund Enforcement Program protects communities by ensuring prompt site cleanup by using an "enforcement first" approach that maximizes the participation of liable and viable parties in performing and paying for cleanups, preserving federal dollars for sites where there are no viable contributing parties. In both the Superfund Remedial and Superfund Emergency Response and Removal Programs, the Superfund Enforcement Program obtains potentially responsible parties' (PRPs) commitments to perform or pay for cleanups through civil judicial and administrative site actions. The Superfund Enforcement Program works closely with the Superfund Remedial and Superfund Emergency Response and Removal Programs and the U.S. Department of Justice (DOJ) to combine litigation, legal, and technical skills to bring enforcement actions and address emerging issues.

The Superfund Enforcement Program:

- Obtains cleanup commitments from responsible parties and other third parties, thereby providing long-term human health and environmental protections and making contaminated properties available for reuse.
- Negotiates site cleanup agreements and, where necessary, takes enforcement actions to require cleanup and recover costs, thereby preserving federal taxpayer dollar for sites where there are no viable contributing parties.
- Develops 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.

In FY 2020, the Superfund Enforcement Program secured commitments for cleanup and cost recovery and billed parties for oversight costs, all totaling more than $814 million. The use of Superfund enforcement tools resulted in cleanup and redevelopment at 130 private party sites in FY 2020.

Payments for cleanups, in addition to the performance of cleanup work, help accomplish cleanup efforts. Payments may be paid into special accounts which may be created when EPA receives funds as part of a settlement agreement. Funds received in settlements with PRPs are then 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 2020, EPA created 45 special

accounts and collected $203.9 million for response work. The Agency disbursed or obligated $236.6 million from special accounts for response work (excluding reclassifications).

The Superfund Enforcement Program continues to encourage and facilitate PRPs' expeditious and thorough cleanup of sites, to create oversight efficiencies, and to promote the redevelopment and reuse of sites by encouraging PRPs to invest in reuse outcomes. In addition, the Superfund Enforcement Program encourages new private investment in the cleanup and reuse of sites by optimizing tools to encourage third-party investment. EPA also works to ensure that legally enforceable institutional controls and financial assurance requirements are in place at Superfund sites to ensure the long-term protectiveness of Superfund cleanup remedies.

FY 2022 Activities and Performance Plan:

Work in this program directly supports the Administration's priorities. In FY 2022, EPA will continue its work to achieve prompt site cleanup, maximize the work participation by PRPs, and secure private party funding of cleanups. In addition, the Agency will prioritize its efforts on the most significant sites in terms of human health and environmental impact.

To support the Agency's focus on climate change and environmental justice, the Superfund Enforcement Program intends to:

- Use authorities under CERCLA and RCRA to proactively investigate and prevent threatened releases in climate-sensitive and overburdened communities.
- Secure cleanup and reuse agreements that address impacts on communities and climate change vulnerabilities, including reuse and long-term stewardship opportunities.
- Increase opportunities for community engagement relating to cleanup and reuse agreements to address community concerns in a meaningful manner, including requiring PRPs to provide funding assistance (where appropriate) to help communities understand the technical aspects of Superfund remedies.
- Integrate sustainable development principles into enforcement tools, policies, and guidance used for the cleanup and reuse of contaminated sites.

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. The Agency also will work to address per- and polyfluoroalkyl substances (PFAS) contamination through gathering information to support actions to respond to PFAS releases, including case development.

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 into 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. EPA provides financial support to DOJ for these activities.

Cost Recovery Support

In FY 2022, the Agency also will continue to standardize and streamline the financial management processes for the financial management aspects of Superfund cost recovery and the collection of 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 2020, the Agency collected $210.2 million in cost recoveries, of which $27.3 million were returned to the Superfund Trust Fund and $182.9 million were deposited in site-specific, interest-bearing special accounts.[6]

The Agency is requesting additional resources which will be used to ensure the Program will have the minimum resources needed to pursue an "enforcement first" approach that maximizes PRP participation at Superfund sites by performing enforcement activities such as conducting PRP searches, negotiating site-specific settlements, and preparing cost recovery packages. These activities ensure that responsible parties conduct or pay for cleanups and preserve federal dollars for sites where there are no viable contributing parties. The additional funding also will help to increase opportunities for community engagement, particularly in environmental justice communities, in the development of cleanup and reuse agreements to ensure community concerns are addressed in a meaningful manner.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$2,078.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$691.0) This program change will be used to maximize the Superfund enforcement program's ability to ensure PRP-funded cleanups at Superfund sites and to increase opportunities for community engagement, particularly in environmental justice communities, in the development of cleanup and reuse agreements to ensure community concerns are addressed in a meaningful manner.

[6] In FY 2020, the Agency earned approximately $81.5 million in interest on the total special account funds invested in the Superfund Trust Fund. The FY 2020 net interest earned includes interest earned from an investment which matured in September 2019.

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).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Hazardous Substance Superfund	***$7,155.8***	***$7,424.0***	***$7,574.0***	***$150.0***
Total Budget Authority	$7,155.8	$7,424.0	$7,574.0	$150.0
Total Workyears	31.8	40.9	40.9	0.0

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 or "Superfund") 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 are contaminated with 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, 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 will 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 2022 Activities and Performance Plan:

Work under this program directly supports the Administration's priorities. In FY 2022, EPA will focus its resources on the highest priority sites, particularly those that may present an imminent and/or substantial endangerment, have human exposure not yet under control or have the potential for redevelopment, or have an impact on communities with environmental justice concerns. EPA also will negotiate and amend, as appropriate, FFAs for federal facility sites on the NPL. EPA will work with federal agencies to encourage greater community outreach and transparency. EPA will address emerging issues such as per- and polyfluoroalkyl substances (PFAS), continue to monitor FFAs for compliance, take enforcement actions at priority sites, and expedite cleanup and redevelopment of federal facility sites. EPA will use alternative dispute resolution processes and other approaches to expeditiously resolve formal and informal disputes. EPA also will continue to seek ways to improve its engagement with other federal agencies, state, tribal, and local governments, and their partners, emphasizing protective, timely cleanups that address communities' needs.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$80.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$70.0) This program change will increase support for core work in the Superfund Federal Facilities Enforcement Program such as focusing its efforts on the highest priority sites.

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) § 120.

Homeland Security

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Science & Technology	$27,021.6	$24,852.0	$25,545.0	$693.0
Hazardous Substance Superfund	***$32,992.9***	***$33,020.0***	***$33,264.0***	***$244.0***
Total Budget Authority	$60,014.5	$57,872.0	$58,809.0	$937.0
Total Workyears	119.3	124.1	125.8	1.7

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 the EPA Colorado office;
- Enhancements for national information technology systems;
- Secured warehouse space for homeland security operations and storage; and
- Laboratory analyses 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.

EPA assists with multi-media training and exercise development/implementation for responders, which establishes and sustains coordination with states, local communities, tribes, and other federal agencies. The Agency also provides technical assistance to other federal agencies, including DHS, the Department of Defense (DOD), the Department of Justice (DOJ), and the Department of Health and Human Services, in the areas of environmental characterization, decontamination, and waste disposal methods. In addition, the Program operates a national

environmental laboratory for chemical warfare agents and implements EPA's National Approach to Response.

FY 2022 Activities and Performance Plan:

In FY 2022, the Homeland Security Preparedness, Response, and Recovery Program will:

- Participate in trainings and exercises on CBRN preparedness and response topics with key federal response partners (e.g., DHS, DOD, and DOJ) on select interagency workgroups.

- Provide expertise on detection, environmental characterization, decontamination, and waste disposal methods following the release of a CBRN agent.

- Maintain operational support for the Emergency Management Portal and *WebEOC* response systems.

- Conduct research to enhance response capabilities by developing methods, tools, and information for site characterization, decontamination, waste management, and clearance for priority chemical, biological, and radiological threats while reducing time and cost and ensuring safety.

- Continue the development of sample collection protocols and analysis methods for inclusion in the Environmental Sampling & Analytical Methods (ESAM)[7] on-line tool. The ESAM detection, sampling, and analysis tool helps local, state, tribal, and federal emergency response field personnel and their supporting laboratories more efficiently respond to incidents, enabling smooth transitions of samples and data from the field to the laboratory to the decision makers.

- Utilize the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft. ASPECT aids first responders by providing aerial surveillance screening for wide-area chemical, radiological, and nuclear detection, as well as infrared and advanced imagery products with real-time data delivery. ASPECT is pursuing a multi-year strategic modernization, and is poised to support relevant climate crisis and environmental justice missions.

- Operate and enhance the Portable High-Throughput Integrated Laboratory Identification System (PHILIS). PHILIS units provide the Nation with mobile analytical "all hazards" confirmatory labs (qualitative and quantitative) with unique capability to analyze chemical and biological warfare threat agents. PHILIS provides on-scene, high-throughput analysis of air, soil, and water samples in areas that have experienced a significant incident. PHILIS can support risk mitigation of contaminated sites which face climate change impacts and disadvantaged communities by mobilizing laboratory capabilities to areas of need.

[7] For more information, please see: https://www.epa.gov/esam.

- Maintain a highly skilled, well-trained, and well-equipped response workforce that has the capacity to respond to simultaneous incidents as well as threats involving CBRN substances. This includes training On-Scene Coordinators and volunteers of the Response Support Corps (RSC) and members of Incident Management Teams (IMTs). RSC volunteers provide critical support to headquarters and regional Emergency Operations Centers and assist with operations in the field. To ensure technical proficiency, this cadre of response personnel requires initial training and routine refresher training.

Performance Measure Targets:

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$129.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$115.0) This change supports core work in Homeland Security: Preparedness and Response activities, including performing homeland security research to enhance response capabilities.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act, §§ 104, 105, and 106; Homeland Security Act of 2002.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$4,175.9	$4,959.0	$5,139.0	$180.0
Science & Technology	$443.0	$501.0	$501.0	$0.0
Building and Facilities	$14,325.7	$6,676.0	$6,676.0	$0.0
Hazardous Substance Superfund	***$994.6***	***$1,030.0***	***$1,030.0***	***$0.0***
Total Budget Authority	$19,939.2	$13,166.0	$13,346.0	$180.0
Total Workyears	7.7	9.2	9.2	0.0

Total workyears in FY 2022 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

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-1 requires EPA to develop a continuity plan that ensures its ability to accomplish its MEFs from an alternate site, during a national disaster, continues and the Agency be able to do so with limited staffing and without access to resources available during normal activities.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will:

- 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.

- 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:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act, §§ 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

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$14,906.1	$14,084.0	$14,226.0	$142.0
Hazardous Substance Superfund	***$1,341.2***	***$1,328.0***	***$1,328.0***	***$0.0***
Total Budget Authority	$16,247.3	$15,412.0	$15,554.0	$142.0
Total Workyears	30.7	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 services for EPA's Digital 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)[8] 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 service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA's System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes including environmental justice. EPA and EN partners routinely reference these shared data registries, 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, foster data consistency and data quality as well as enable data integration.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA's Digital Strategy that supports business process change agencywide. Under this strategy, and the 21st Century Act[9], the Agency is streamlining business processes and systems to reduce reporting burden on states and regulated facilities, and to improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. EPA also is responsible for managing EN technical governance groups and

[8] For more information on the Central Data Exchange, please see: http://www.epa.gov/cdx/.
[9] For more information on the 21st Century Integrated Digital Experience Act, please refer to: https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf.

administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secured approach for EPA and its state, tribal, and territorial partners to more effectively and efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency has provisioned Virtual Exchange Services (VES) or virtual nodes to facilitate more than 110 large-scale data transactions supporting states and tribal partners, with another 20 anticipated by the end of FY 2022. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. The shared electronic identity proofing and signature services for CROMERR support 31 partner regulatory reporting programs to date and over 15 states, tribes, and EPA partners will be added in FY 2022. EPA estimates that partners adopting shared CROMERR services save $120 thousand in development and at least $30 thousand in operations each year, which results in a cost avoidance of greater than $2.5 million for EN partners.

In FY 2022, EPA will continue to improve the functionality and use of the System of Registries.[10] In addition to streamlining the Registries, EPA will launch a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services. Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example is the Agency's effort to promote the adoption of tribal identification services (TRIBES) across EPA systems. This progress is tracked by EPA's Chief Information Officer, who has issued a memorandum calling on all applicable systems to incorporate this shared data service. In FY 2020, EPA increased the number of EPA systems using TRIBES services by more than 26 percent, from 19 to 24 systems, with many other systems currently integrating TRIBES.

In FY 2022, EPA will continue implementing a solution related to shared facility identification information. In FY 2020, EPA began to re-baseline the existing centralized facility registry, as managing facility identification centrally reduces the requirement by programs to manage that information locally. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Similar to facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks the number of registry webpages users and web service hits as one measure of usage. For example, the SRS website is visited by approximately 50 thousand users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms. Priorities for EPA registries include improving registry technologies by moving them into an open-source platform, so they are cloud-ready.

[10] For more information, please see: https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp.

By 2022, EPA will have moved TRIBES, SRS, and the Registry of EPA Applications, Models and Data Warehouses (READ) into a cloud-based open-source platform. EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

Using the information available in the registries, EPA created RegFinder to help industry discover potentially applicable regulations. In FY 2022, EPA will continue to improve the functionality and information in RegFinder and to improve outreach with regulated industry to ensure the tool meets customer needs. RegFinder builds on services from four EPA data catalogs: 1) SRS; 2) EPA Enterprise Vocabulary; 3) a catalog of federal statutes and regulations (Laws and Regulations Services); and 4) North American Industrial Classification System to enable a user to search for laws and regulations by substance, keyword, or industrial processes.

In FY 2022, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain, utilize, and improve systems to 1) facilitate the import and export of legitimate goods; and 2) leverage big data and artificial intelligence tools to identify and prevent or stop illegal goods from entering or leaving the United States. EPA supports over 20 data exchange types within EPA and with CBP to automate and streamline over 8 million annual import and export filings. This automation is essential for managing a significantly increasing number of imports and exports (e.g., due in large part to e-Commerce) and allows coordinators/officers to focus on compliance monitoring and key high-value targeting activities for non-compliant imports and exports, and to better coordinate with CBP.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (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); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

IT/ Data Management/ Security

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$6,190.4	$8,285.0	$14,116.0	$5,831.0
Hazardous Substance Superfund	***$927.6***	***$659.0***	***$5,659.0***	***$5,000.0***
Total Budget Authority	$7,118.0	$8,944.0	$19,775.0	$10,831.0
Total Workyears	12.1	13.1	13.1	0.0

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program's mission is to protect the confidentiality, availability, and integrity of EPA's information assets. The information protection strategy includes, but is not limited to, risk management, oversight, and training; network management and protection; and incident management.

FY 2022 Activities and Performance Plan:

Cybersecurity is a serious challenge to our Nation's security and economic prosperity. Effective information security requires vigilance and the ability to adapt to new challenges every day. To respond, the Agency maintains a robust, dynamic approach to cybersecurity risk management, governance, and oversight. In FY 2022, EPA requests an increase of $5 million to strengthen capacity of the Information Security Program in the Superfund Appropriation. The Agency will continue improving its security posture, partnering with public and private sector entities to promote the adoption of cybersecurity best practices, and reporting to the White House and Congress on the status of these initiatives.

EPA will continue implementing the Strengthening and Enhancing Cyber-capabilities by Utilizing Risk Exposure Technology Act (SECURE Technology Act) and Section 889 of the FY 2019 National Defense Authorization Act to mitigate supply chain risks in the procurement of information technology (IT). EPA's Senior Procurement Official, in consultation with the Chief Information Security Officer, issued agencywide policy implementing the requirements of Section 889 (a)(1)(B), conducted training for the acquisition community, and made all required actions (amendments, modifications, etc.) on existing contracts to fully implement Section 889. The policy also will guide future contracts to fully comply with the Section 889 requirements.

Risk Management, Oversight, and Training:

In FY 2022, EPA will continue to include cybersecurity and privacy components in ongoing senior leadership program reviews. These reviews enhance Chief Information Officer (CIO) oversight by enabling better risk area determination and targeted improvement direction to system and mission program managers. While EPA programs and regions maintain responsibility for improving their performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvements. In FY 2020, this review process led to an 87 percent agencywide reduction in system level vulnerabilities.

In FY 2022, the Agency will continue to collect Federal Information Security Modernization Act (FISMA)[11] metrics and evaluate related processes, tools, and personnel to identify areas of weakness and opportunities for improvement. EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer will continue to monitor and report on these metrics, in line with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements.*[12]

Further, EPA also deploys Agency-specific role-based training to ensure personnel in key cybersecurity roles have the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

Network Management and Protection:

In accordance with OMB Memorandum M-19-17 *Enabling Mission Delivery through Improved Identity, Credential, and Access Management*, EPA will continue to review and improve identity management capabilities through authentication infrastructure and system configurations.

In FY 2022, EPA will strengthen cloud security through cloud access security broker and cloud platform management services, which enables remote workers to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC).[13] The Agency also will implement tools to improve web content filtering capabilities to prevent malicious and unauthorized web content from impacting EPA systems and users. The Agency will continue to build an Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments,[14] and to monitor and report on EPA networks and systems.

The Agency is working to address shortfalls in current Office of Management and Budget risk posture assessments. These investments include Limiting Privilege Users to Trusted Websites, developing an automated mechanism preventing the use of untrusted removable media from

[11] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.
[12] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf.
[13] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf.
[14] These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: https://www.epa.gov/sites/production/files/2017-10/documents/_epaoig_20171030-18-p-0031.pdf.

workstations and servers, as well as segmenting High Vulnerability Assets across the information environment to improve security and compliance.

Incident Management:

Cyber-attacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the CIO's Information Security and Privacy Programs through continuous monitoring functions. Continuous monitoring capabilities, which serve to identify and address incidents quickly, are vital to ensure that EPA's information environment remains safe. In FY 2022, this investment will support the on-going implementation of capabilities for data labeling and data loss prevention, and remote computer imaging and forensics, all of which will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. In accordance with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements*,[15] in FY 2022, EPA will continue to mature the Microsoft Cloud Access Service, which will provide a monitoring capability to improve incident detection and response capabilities. Through CSIRC, EPA will continue to 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.

Additionally, the Agency practices Coordinated Vulnerability Disclosure (CVD). By working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered, CVD decreases the harm or time an adversary can use to deny or disrupt services to the networks.

EPA continues to leverage capabilities through the Continuous Diagnostics and Mitigation (CDM) Program, which addresses agencies' cybersecurity protection gaps and allows EPA to efficiently identify and respond to federal-wide cybersecurity threats and incidents. In FY 2022, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program will focus on closing remaining gaps in privileged access to EPA's network and continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection and response capabilities, and integrate mobile device discovery to expand program capabilities. In FY 2022, EPA estimates a $12.6 million budget for the CDM Program across the EPM and Superfund accounts.

[15] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf.

Supply Chain Risk Management:

In FY 2022, EPA will work on developing a strategy for how the Agency will implement Supply Chain Risk Management Security Controls to comply with the Government Accountability Office (GAO) findings[16] and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*.[17] This initial work will include coordinating across the Agency with professionals from Information Technology, Information Security and Acquisitions, to update the policy and obtain the necessary tools to address these critical security requirements which were a vulnerability in the SOLAR WINDS FY 2021 intrusion.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$5,000.0) This program change reflects a necessary increase to continue support for the implementation of the critical CDM Program and other IT security requirements. This investment will be used to close existing gaps by improving audit capability, ensuring accountability, and adding protections directly associated with the information.

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); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

[16] Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-164SU.
[17] For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$86,699.8	$82,715.0	$86,744.0	$4,029.0
Science & Technology	$3,473.7	$3,072.0	$3,121.0	$49.0
Hazardous Substance Superfund	***$15,168.6***	***$13,826.0***	***$15,202.0***	***$1,376.0***
Total Budget Authority	$105,342.1	$99,613.0	$105,067.0	$5,454.0
Total Workyears	442.3	482.4	486.4	4.0

Total workyears in FY 2022 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. The Program ensures analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; rapid, secure, and efficient communication; and access to scientific, regulatory, policy, and guidance information needed by the Agency, regulated community, and the public.

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 access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

To date, throughout the COVID-19 pandemic, EPA has continued to maintain continuity of operations with most of the Agency in a maximum telework posture. Specifically, the IT/DM Program has doubled the Virtual Private Network infrastructure, provisioned over 1,449 new users with EPA laptops enabling day one productivity from telework locations, and deployed Microsoft Teams and Teams Live Events, allowing EPA offices to conduct virtual video-based meetings for up to 10 thousand participants

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will further strengthen its IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2020, EPA scored an overall B+, the second highest rating among CFO Act agencies.

The Agency requests an increase of more than $1.3 million for the IT/DM Program in the Superfund Appropriation. EPA will continue implementing OMB/NARA Memoranda M-19-21, which directs agencies to manage all permanent records electronically to the fullest extent possible with appropriate metadata and all temporary records in an electronic format or store them in commercial records storage facilities by December 31, 2022. To accomplish this, EPA will continue to make the Agency aware of this Directive and encourage the transfer of inactive permanent and temporary paper records to the Federal Records Centers before the OMB/NARA's target date. EPA will look to apply artificial intelligence and machine learning for content tagging in the records digitization process to improve the access and quality of EPA's digitized permanent records. Further, in FY 2022, EPA will complete buildout of two digitization centers and continue the development and deployment of Records Management Technologies, including: Content Ingestion Services into the National Computer Center Amazon Web Services environment, deployment of a Paper Asset Tracking Tool, and the buildout of a new, cloud-hosted, Record Management Technology application focused on improving search capabilities.

In FY 2022, EPA will bolster its agencywide support for annual operations and maintenance of IT infrastructure, including eDiscovery (supporting the Agency's FOIA Program), Local Area Network Switches and Regional Laptop Refreshes. These services are crucial for EPA's operations, and consistent resources are necessary for operations and the Agency's ability to carry out its mission. This investment will enable EPA to establish a rolling four-year refresh of laptops without any delays for funding, a critical IT infrastructure requirement as EPA adapts to the future of work in a post-COVID environment.

EPA also will continue to maintain and manage its core IT/ DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program, which develops training for different stakeholder communities and assesses documentation for all public-facing EPA systems/applications. EPA's Controlled Unclassified Information Program will standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency, and with the public, meeting federal standards as required by Executive Order 13556 – *Controlled Unclassified Information*.[18]

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public. The Program focuses on collaborations such as the E-Enterprise Initiative, which facilitates conversations among EPA, states, and tribal leaders about opportunities to improve customer services across the environmental enterprise. In FY 2022, the CX Program will continue to promote IT modernization, accountability, and transparency, and to improve how it supports and manages the lifecycle of information and information products.

Under the leadership of the Agency's Chief Technology Officer and Chief Architect, EPA will continue to enhance enterprise software development and architecture capabilities, including application development, deployment approaches, and technical platform support. EPA also will

[18] For more information, please refer to the Executive Order: https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information.

identify and prioritize the interoperability of data within EPA and across federal agencies that benefits internal and public-facing services. Finally, EPA will continually monitor and develop staff proficiencies in the understanding and use of data.

The Agency also 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 can integrate and interpret multiple data sets and information sources to support environmental decisions. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Application.

EPA's One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue to upgrade its web infrastructure, ensuring that it meets current statutory and evolving security requirements.

Performance Measure Targets:

Work under this program supports performance results in the Facilities Infrastructure and Operations under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$66.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,310.0) This program change is an increase for EPA to continue its progress towards upgrading the Agency's enterprise-wide records management system and enhancing the digitization of paper records. Centralizing, managing, and digitizing the Agency's records will decrease onsite storage costs, improve records management, and position EPA to comply with statutory requirements under the Federal Records Act.

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 Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Rehabilitation Act of 1973 § 508.

Legal / Science / Regulatory / Economic Review

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$800.2	$864.0	$1,141.0	$277.0
Hazardous Substance Superfund	***$1,014.2***	***$832.0***	***$857.0***	***$25.0***
Total Budget Authority	$1,814.4	$1,696.0	$1,998.0	$302.0
Total Workyears	3.5	5.9	6.9	1.0

Program Project Description:

EPA's Alternate Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on Superfund Program matters prior to engaging in formal litigation. The Program provides legal counsel, facilitation, mediation, consensus building advice and support. The Program supports the use of ADR in the Superfund Program's work with communities and Potentially Responsible Parties.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to provide conflict prevention and ADR services on Superfund Program matters. Specifically, ADR will:

- Continue to administer it's five-year, $53 million Conflict Prevention and Resolution Services contract. The contract supports more than 50 individual Superfund sites by providing facilitators to work with Community Advisory Groups and is expected to take on an additional 10-20 sites in FY 2022.
- Directly provide the above services through the conflict resolution specialists on staff. The ADR Program expects to directly support Agency programs and stakeholders by providing facilitation of public meetings, mediation, or other consensus building support on 1-2 Superfund projects.
- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program offers this training through its cadre of eight interactively designed courses to all national program offices and regional offices. Adapting to a virtual environment in FY 2021 has allowed the ADR program to reach Superfund Community Involvement Coordinators in each of the 10 EPA regions and expects that to increase in FY 2022.

The following are examples of FY 2020 accomplishments supporting the Superfund Program:

- Provided facilitation and mediation assistance at more than 50 Superfund sites, including sites from the Administrator's emphasis list, with particularly challenging community engagement issues, across all EPA regions.
- Provided sustained mediation services regarding a permit dispute to the GE-Pittsfield / Housatonic River Superfund Site. Because of the Conflict Prevention and Resolution Center's

efforts and resources, the parties were able to reach agreement on reasonable compromises to site clean-up. This matter was an extremely complex and highly charged negotiation.
- Provided mediation services to an EPA-led cost allocation process on the Diamond Alkali / Passaic River Superfund site. The final allocation report is expected to assist the region in negotiations with potentially responsible parties.
- Provided facilitation and training support to the Superfund Community Involvement University, which provides Agency Community Involvement Coordinators public involvement training and skills.

Performance Measures Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$22.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3.0) This program change is an increase to support core capacity on Superfund Program matters.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; 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).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$49,878.3	$49,595.0	$71,895.0	$22,300.0
Hazardous Substance Superfund	***$628.3***	***$443.0***	***$450.0***	***$7.0***
Total Budget Authority	$50,506.6	$50,038.0	$72,345.0	$22,307.0
Total Workyears	250.4	263.9	301.5	37.6

Total workyears in FY 2022 include 8.8 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

Program Project Description:

The Legal Advice: Environmental 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 to clean up contaminated sites, which advances environmental justice for neighboring communities and supports EPA's state, tribal and local partners. For example, the 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.

The 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. The Program is essential to providing the high-quality legal work to ensure that EPA's decisions protect human health and the environment.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will prioritize its legal support capabilities for the Superfund Program in order to assist with the Administration's priorities including: tackling the climate crisis, advancing environmental justice, and supporting state, tribal and local partners. The Program will work to support CERCLA activities and these priorities, to include: counseling on how to address environmental justice and climate resiliency in EPA's remedy decisions at Superfund sites, defensibility of agency actions, drafting significant portions of agency actions, and participating in litigation in defense of agency actions.

The Program will continue to provide key legal advice related to designating Per- and polyfluoroalkyl substances (PFAS) as a CERCLA hazardous substance, an action that would significantly advance environmental justice for communities across the country impacted by PFAS. Legal review is critical to the Superfund Program at many points throughout the cleanup process. This program also provides legal advice and counseling for final rules adding Superfund sites to the National Priorities List (NPL), an important step in advancing cleanup at the Nation's

most contaminated sites. This benefits states, tribes, and local communities, who may not have adequate resources to address these sites on their own.

The following are examples of recent favorable case outcomes and accomplishments which illustrate this program's important role in implementing the Agency's core priorities and mission:

- Favorable Settlement with Utah in the matter of *In re Gold King Mine Release in San Juan County, Colorado on August 5, 2015*, MDL No: 1:18-md-02824-WJ (D. N.M.): Served as the Agency lead in negotiating a favorable settlement (signed August 5, 2020) with Utah, which had alleged $1.9 billion in damages from the Gold King Mine release. Utah agreed to dismiss its environmental claims (CERCLA, CWA, and RCRA) and tort claims and EPA has agreed to act on Utah's applications for $3 million in CWA grants as well as to conduct CERCLA site assessment work at select abandoned mine sites in Utah by December 2021. This settlement allows EPA and its state partner to work cooperatively on addressing Utah's contaminated land and water quality.

- U.S. Supreme Court decision in *Atlantic Richfield, Co. v. Christian, et. al.*, No. 17-1498, slip opinion (U.S. Apr. 20, 2020): Served as the Agency lead for the U.S. brief that was filed with the U.S. Supreme Court in an appeal from a Montana Supreme Court decision, which had held that individual landowners can seek restoration damages under state law to remediate properties that are within the boundaries of the Anaconda Smelter Superfund NPL Site. The Supreme Court affirmed in part and vacated in part the Montana Supreme Court decision. Though the Court held that CERCLA 113(h) does not apply to state courts, the Court left much of the favorable federal precedent on 113(h) untouched. The Court also held that the plaintiffs cannot proceed with any remediation of their properties without first obtaining EPA authorization pursuant to 122(e)(6). Ultimately, EPA obtained a favorable outcome that allows EPA to maintain the protectiveness of its remedies at Superfund sites.

- Favorable Decision in Challenge to NPL listing (*Meritor, Inc. v. EPA,* No. 18-1325 (D.C. Cir.) (July 28, 2020)): Served as the Agency lead in the D.C. Circuit litigation challenging EPA's placement of the Rockwell International Wheel & Trim Site in Grenada, Mississippi, on the Superfund NPL. In a technically oriented opinion, the court upheld the Agency's application of the Hazard Ranking System (HRS) to score the site above the 28.5 numerical threshold for NPL eligibility. The decision is significant as it is the first challenge to a site that was listed based on vapor intrusion under the Subsurface Intrusion pathway which was added to the HRS in January 2017. In denying the petition, the court acknowledged that the Subsurface Intrusion pathway and validity of the HRS framework were not in dispute.

- Favorable Decision in Challenge related to Cleanup of Hudson River PCBs Superfund Site (*State of NY v. EPA,* 1:19-cv-1029 (N.D.N.Y. Mar. 11, 2021)): Served as the Agency lead in litigation by the State of New York challenging EPA's issuance of a Certification of Completion to General Electric at the Hudson River PCBs Superfund Site. The court upheld EPA's cleanup and dismissed New York's claims under the Administrative Procedure Act, holding that EPA had not acted *ultra vires*, and that New York failed to allege any clear error in judgment by EPA when EPA issued the Certification. The Court

also noted that New York's claims challenging the Consent Decree were procedurally improper and that the proper forum for New York to seek relief in this case was by intervening in the original case in which the Consent Decree was issued.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$4.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3.0) This program change is an increase to provide legal representation, legal counseling, and legal support for EPA's Superfund Program.

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).

Operations and Administration

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$27,433.0	$32,247.0	$34,121.0	$1,874.0
Leaking Underground Storage Tanks	$155.9	$132.0	$132.0	$0.0
Hazardous Substance Superfund	***$24,356.1***	***$23,800.0***	***$30,519.0***	***$6,719.0***
Total Budget Authority	$51,945.0	$56,179.0	$64,772.0	$8,593.0
Total Workyears	266.3	285.7	325.7	40.0

Program Project Description:

Superfund resources in the Acquisition Management Program support EPA's contract activities, which cover planning, 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.

In response to the COVID-19 pandemic, EPA will continue providing regular guidance and flexibilities to the Agency's acquisition community and contractors, including increasing the micro-purchase threshold and providing an Emergency Acquisition Toolkit of best practices and templates. EPA also implemented Section 3610 of the Coronavirus Aid, Response, and Economic Security (CARES) Act, which authorized federal agencies to reimburse contractors for paid leave.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA requests an increase of 30 FTE and more than $6.7 million to strengthen the Acquisition Management Program in the Superfund Appropriation. These resources will assist the Agency to continue its efforts to process and award contract actions in a timely manner in support of EPA program offices and in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP). Timely procurement processing is crucial to efficient operations. In FY 2020, EPA exceeded its target of meeting procurement action lead times (PALT) for 90 percent of contract actions. The Agency is on track to meet the FY 2021 target of 95 percent. In FY 2022, EPA will continue exploring opportunities for improving PALT.

This investment also supports the implementation of supply chain risk requirements of Section 889 of the 2019 National Defense Authorization Act and the "Made in America Laws" referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's Workers*[19] while furthering Category Management implementation requirements. In FY 2022,

[19] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/.

EPA will focus on establishing a comprehensive architecture for the Agency's supply chain as well as mechanisms to identify and mitigate risk within the supply chain. The Agency will support efforts to ensure there is diversity, and thereby strength, of the supply chain by monitoring and ensuring small business utilization and "Buy American" implementation from a supply chain management and account management lens.

EPA also will work to ensure that its procurement activity aligns with Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[20] In FY 2022, EPA will aim to eliminate any barriers found in its Analysis of Barriers to Ensuring Equity in EPA Acquisitions, to be completed in FY 2021, to allow for full and equal participation in agency procurement and contracting opportunities and will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services. Further, in line with Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, EPA will work with the Federal Acquisition Regulatory Council in developing and implementing regulatory amendments that promote increased contractor attention on reduced carbon emission and Federal sustainability.

EPA is fully committed to leveraging category management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2022, EPA will continue to leverage data provided by the General Service Administration, and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of Federal Strategic Sourcing vehicles, and BIC acquisition solutions.

- The OMB Category Management focuses on total acquisition spend transitioned from contract vehicles that are unaligned with category management principles to the SUM program. EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions* to mandate the use of enterprise-wide contract vehicles, in addition to BIC contract solutions and other OMB-designated contract solutions. Based on this policy change, EPA anticipates that 58 percent of total addressable spend will have been transitioned into the SUM Program by the end of FY 2022, relative to the FY 2020 result to date of 43.2 percent.

- In FY 2022, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[21] Through SUM Tier 2 and 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. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools

[20] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[21] For additional information, please see: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*

available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool, which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

- In FY 2022, 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 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 is transforming the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. In FY 2020, EPA realized $5.9 million cost avoidance by using data analysis tools to monitor specific, measurable data related to print services, cellular services, shipping, Microsoft software, voice services, office supplies, lab supplies, PCs, and furniture. Since the beginning of the Strategic Sourcing Program in FY 2013 through the second quarter of FY 2021, EPA has achieved cost avoidance of $26.2 million. In FY 2022, EPA anticipates approximately $4.3 million in additional savings.

In FY 2022, EPA will continue to evaluate options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system, in line with government-wide mandates to increase the use of shared services.[22,23] The Agency is focusing on a modern acquisition solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Transition preparations include data management strategies, business process reviews, and user engagement to develop a business case and ensure data elements conform with Federal Government Procurement standards. As part of this effort, in FY 2022, EPA will implement a new Government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration (GSA) and OMB requirements. EPA also will continue implementing the Financial Information Technology Acquisition Reform Act (FITARA) by competing contracts with multiple vendors or confining the scope of the contract to a limited task, thereby avoiding vendor lock-in, and developing acquisition vehicles that support the Agency in FITARA compliance and implementation.

Performance Measure Targets:

Work under this program supports performance results in the Acquisition Management Program under the EPM appropriation and the Central Planning, Budgeting and Finance Program under the EPM appropriation.

[22] OMB-17-22 "Comprehensive Plan for Reforming the Federal Government, for more information, please see: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-22.pdf.
[23] OMB-19-16 "Centralized Mission Support Capabilities for the Federal Government, for more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,515.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$5,204.0 / +30.0 FTE) This program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner. It also will support the Agency's efforts to "Buy American". This investment includes $5,204.0 thousand in payroll.

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).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$70,751.8	$76,718.0	$81,563.0	$4,845.0
Leaking Underground Storage Tanks	$354.8	$416.0	$434.0	$18.0
Hazardous Waste Electronic Manifest System Fund	$114.5	$0.0	$0.0	$0.0
Hazardous Substance Superfund	***$24,772.5***	***$26,561.0***	***$27,720.0***	***$1,159.0***
Total Budget Authority	$95,993.6	$103,695.0	$109,717.0	$6,022.0
Total Workyears	422.0	462.0	465.0	3.0

Total workyears in FY 2022 include 2.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.
Total workyears in FY 2022 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

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) 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 systems to ensure effective stewardship of Superfund resources. This program supports the requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010;[24] Digital Accountability and Transparency (DATA) Act of 2014;[25] and the Federal Information Technology Acquisition Reform Act (FITARA) of 2015;[26] the Federal Management Financial Integrity Act (FMFIA);[27] the Inspector General Act of 1978, as Amended.[28]

FY 2022 Activities and Performance Plan:

In FY 2022, 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 ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System which includes a Performance Module, and related financial reporting systems. The Agency is reviewing its financial systems for

[24] For more information, please see: https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf.
[25] For more information, please see: https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf.
[26] FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf.
[27] For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf.
[28] For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg1101.pdf.

modernization opportunities to support greater efficiencies and effectiveness and targeting legacy systems for replacement. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress.

Also, in FY 2022, EPA will standardize 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. For example, EPA implemented a new billing process in FY 2020 that created efficiencies allowing the Agency to send out over 180 more Superfund bills worth an additional $62 million in amounts billed to primary responsible parties. EPA will continue to standardize and streamline internal business processes and adopt federal shared services when supported by business case analysis. For example, EPA has implemented Treasury's Invoice Payment Processing System (IPP) for reviewing and paying commercial vendors. As of April 2021, more than 80 percent of contract invoices are being handled through this service. When fully implemented in FY 2022, the full range of payment types will be processed in the system, greatly reducing manual effort, and allowing the elimination of two legacy administrative systems.

During FY 2022, EPA will focus on implementation of G-Invoicing, Treasury's Interagency Agreement system. G-Invoicing will integrate into the Agency's accounting system as part of a government-wide effort to standardize and improve financial management of interagency agreements. The goal of G-Invoicing is to align EPA's business processes to deliver the new, more streamlined approach for the end-to-end delivery of financial transactions for interagency agreements. This will involve implementing a new version of EPA's accounting systems software in FY 2022. Extensive testing and training will be needed.

Also, during FY 2022, 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. In FY 2022, EPA will deploy the e-Recovery system for Superfund, Federal Emergency Management Agency, and Oil billing. This new system modernizes the legacy system and improves functionality and security. The Program will continue to implement FITARA requirements in accordance with EPA's Implementation Plan.[29] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology (IT) needs are properly planned and resourced in accordance with FITARA. In addition, the Program will continue work to implement the OMB-mandated framework under Technology Business Management (TBM) to create transparency under IT resource management and facilitate data-driven decision-making and communication between IT and finance. In addition, the Program is in the early stages of planning a modest reorganization to incorporate updated activities and workflows.

During FY 2022, EPA will continue to follow OMB Circular A-123 guidance, conduct internal control program reviews, and use the results and recommendations from the Office of Inspector General to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. The Agency will collect key operational statistics for its

[29] For more information please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

financial management program to further evaluate its operations and for management decision-making. For example, in FY 2019, EPA observed a trend that Agency corrective actions were increasingly being implemented beyond the agreed upon resolution date reaching a peak in FY 2020 of 31 outstanding late corrective actions. Through a process of meeting regularly with offices and establishing timelines to effectively closeout corrective actions, by the middle of FY 2021, EPA was able to cut the number of late corrective actions in half. In addition, 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,[30] EPA has continually reviewed, sampled, and monitored its payments to protect against erroneous payments and complied with reporting requirements with very low rates of erroneous payments (below the 1.5 percent threshold for each payment stream), well below government averages.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):

- (+$1,159.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE from annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

[30] For more information, please see: https://www.govinfo.gov/content/pkg/PLAW-107publ300/pdf/PLAW-107publ300.pdf.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$285,437.3	$285,441.0	$297,748.0	$12,307.0
Science & Technology	$68,812.7	$67,500.0	$68,533.0	$1,033.0
Building and Facilities	$32,216.3	$27,076.0	$56,076.0	$29,000.0
Leaking Underground Storage Tanks	$1,066.0	$836.0	$837.0	$1.0
Inland Oil Spill Programs	$640.2	$682.0	$683.0	$1.0
Hazardous Substance Superfund	***$82,734.0***	***$68,727.0***	***$72,801.0***	***$4,074.0***
Total Budget Authority	$470,906.5	$450,262.0	$496,678.0	$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Superfund resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The 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, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

In response to the COVID-19 pandemic, EPA will continue ensuring the safety of EPA facilities and personnel by following the EPA Workplace Safety Plan in accordance with CDC guidelines. This includes adherence to requirements for mask-wearing, occupancy limits, procuring disinfecting and cleaning supplies, hand sanitizer for use by facility personnel and EPA staff, promoting physical distancing through signage, and procuring safety shields for personnel with increased contact with other people (e.g., security guards, badging office personnel, and administrative staff).

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will continue to invest in the reconfiguration of EPA's workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465,[31] the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will aim to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also

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

will continue to work to enhance its federal infrastructure and operations in a manner that increases efficiency.

EPA's long-term consolidation plan for FY 2018 – FY 2022 has the potential to provide a cumulative annual rent avoidance of approximately $28 million across all appropriations by releasing 850,641 square feet. This will help offset EPA's escalating rent and security costs. In FY 2020, EPA released 116,425 square feet of unused office and warehouse space and is planning to release an additional 26,017 square feet in FY 2021. Planned consolidations and space releases in FY 2022 will allow EPA to release an expected 467,345 square feet of space. For FY 2022, the Agency is requesting $47.53 million for rent, $2.49 million for utilities, and $8.96 million for security in the Superfund appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

In support of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,[32] EPA will work to secure physical and operational resiliency for agency facilities. The Agency will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space 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 funding to achieve long-term cost avoidance and sustainability goals.

EPA will continue to manage lease agreements with the General Services Administration (GSA) and private landlords, and maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. In line with Executive Orders 14008[33] and 13990[34], EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, LEED Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment will support EPA facilities infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC), which is necessary to meet federal sustainability goals. Additionally, EPA will direct all future fleet procurements, where economically feasible, to the purchase of electric vehicles, or lease through GSA electric vehicles. This allows EPA to prioritize energy efficiency and climate resilience in the rehabilitation of United States Government fleet vehicles and combat the climate crisis.

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. In FY 2022, the Agency will continue to partner with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized

[32] For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.
[33] For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.
[34] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis.

HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

Work under this program supports performance results in the Facilities Infrastructure and Operations Program under the EPM appropriation and the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$94.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,713.0) This change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, and transit subsidy.

- (+$267.0) This program change is an increase to support the growing workforce at EPA and ensuring an optimal footprint.

Statutory Authority:

Federal Property and Administration Services 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).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$26,319.8	$25,430.0	$28,730.0	$3,300.0
Hazardous Substance Superfund	***$3,561.3***	***$3,210.0***	***$3,390.0***	***$180.0***
Total Budget Authority	$29,881.1	$28,640.0	$32,120.0	$3,480.0
Total Workyears	135.8	139.5	159.5	20.0

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 meet the highest fiduciary standards, the grant and IA funding produces measurable results for environmental programs, and 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 U. S. Coast Guard.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will work to ensure that its financial assistance activity supports Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[35] In FY 2022, the Agency will continue to implement activities to achieve efficiencies while enhancing quality and accountability to ensure that opportunities for competitive grants are made publicly available, so all eligible applicants have an opportunity to compete for them. EPA also will explore methods to use the grant competition and grant-making processes to promote the objectives of the Executive Order.

EPA also will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS), which the Agency deployed in FY 2021, in conjunction with the retirement of an outdated legacy grants management system. NGGS has the capability to improve capacity and align with the requirements of the Grant Reporting Efficiency and Agreements Transparency (*GREAT*) Act, applicable Office of Management and Budget (OMB) Quality Service Management Offices

[35] For additional information on the Executive Order, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

(QSMO) standards, and the Federal Integrated Business Framework for grants (e.g., required standard data elements for grants reporting). In FY 2022, EPA will deliver a national solution for electronic grants record management that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards, and will implement a new Government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

Further, EPA will continue to focus on reducing the administrative burden on EPA and grant applicants and recipients, and on improving grants management procedures. The Agency will continue implementation of the FY 2021-2025 Grants Management Plan, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, and ensuring effective grant oversight and accountability. The Agency also will continue to explore opportunities to improve efficiencies within the grants management processes.

In FY 2022, EPA expects to complete activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions, by October 1, 2022, in line with Department of the Treasury requirements.

The Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal programs. In FY 2022, EPA will continue to focus suspension and debarment resources on protecting the integrity of federal procurement and assistance programs. 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 federal assistance awards (e.g., grants, cooperative agreements, loans, and loan guarantees). Several federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs to protect the public interest.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$150.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$30.0) This program change will support core program work to ensure the timely processing of financial assistance agreements.

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.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Programs & Management	$47,042.8	$46,229.0	$53,254.0	$7,025.0
Hazardous Substance Superfund	***$6,094.4***	***$6,202.0***	***$6,842.0***	***$640.0***
Total Budget Authority	$53,137.2	$52,431.0	$60,096.0	$7,665.0
Total Workyears	223.2	229.9	252.4	22.5

Program Project Description:

Superfund resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HCM functions including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement. This includes personnel and payroll processing through the Human Resources Line of Business. These resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency's Human Capital Operating Plan.

In response to the COVID-19 pandemic, EPA has provided workplace flexibilities to employees with dependent care situations, including expanding work hours and schedule requirements. EPA seamlessly implemented a virtual onboarding process during the COVID-19 pandemic, hiring over 1,449 employees since the Agency began remote work status on March 24, 2020.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA requests an additional 0.8 FTE and $640 thousand to strengthen and expand capacity for the HR Management Program in the Superfund Appropriation. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR functions are focused on strengthening the workforce, retaining critical expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure employees have the right skills to successfully achieve the Agency's core mission today and in the future. The Agency is actively involved with OPM's Chief Human Capital Officer Council and the President's Management Council Agenda to address the challenges of the 21st Century federal workforce. In line with Executive Order 14008*, Tackling the Climate Crisis at Home and Abroad,*[36] EPA will identify the most critical need for climate literacy training for its workforce. These efforts will focus on integrating climate adaptation, risk disclosure, and other education activities into the management of EPA's procurement, real property, public lands and waters, and financial programs.

[36] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/, *Executive Order on Tackling the Climate Crisis at Home and Abroad.*

In FY 2022, EPA will support evidence-building activities as part of its implementation of the Evidence Act and the activities will be designed to ensure that the workforce strategy is guided by data-driven decisions. This work includes revalidation of EPA's Agency-specific Mission Critical Occupations (MCOs), enhancement of EPA's competency assessment tool, skills gap analysis among Agency-specific MCOs, and knowledge transfer strategies to support succession planning.

In FY 2022, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with succession planning by identifying workforce gaps due to anticipated retirements and attrition trends. Approximately 25 percent of EPA's workforce is retirement eligible and another 19 percent of the current workforce will become retirement eligible over the next five years.

EPA has increased efforts to improve Diversity and Inclusion, hosting virtual outreach events targeting diverse networks such as veterans, Historically Black Colleges and Universities (HBCUs), and Returned Peace Corps Volunteers. The Agency reviews applicant flow data analysis on diversity every 6 months. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities and recruitment incentives. In FY 2022, EPA will work with STEM-focused institutions to bring on college students to experience working at the Agency, the Society of Hispanic Professional Engineers for promoting a diverse workforce, and participate in the President Management Council's Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees.

In FY 2022, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate FedTalent, a one-stop-shop talent management system provided through the Department of Interior's Interior Business Center. FedTalent serves as a valuable tool to assist with developing, delivering, and tracking high-impact training. Additionally, EPA will maintain and operate USA Performance, provided through the U.S. Office of Personnel Management, enabling the Agency to automate the performance appraisal process throughout the entire performance rating cycle.

EPA also will work to support the efficient recruitment and onboarding of new employees to build the EPA workforce. EPA's Human Resources Shared Service Centers (HRSSC) leverage data analytics to improve performance across the Agency's Human Resources Management Program, reducing EPA's Time-to-Hire average from 95 days in FY 2018 to 83 days in FY 2020. In FY 2022, EPA will coordinate and deliver a comprehensive Human Resources Management Program, including: outreach/recruitment; employee relations and advisory services; training and employee orientation; and management guidance on workforce planning and personnel policies.

The Agency continues to strengthen and improve its HR Accountability Program through internal assessments with OPM's HRStat framework. With a focus on efficient, effective, and accountable systems, EPA is meeting all regulatory requirements and looks for opportunities for continuous improvement. EPA also will maintain statutorily required services associated with the Employee Counseling Assistance Program, the Federal Worker's Compensation Program, the Drug-free Workplace Program, Unemployment Compensation, and Sign Language Interpreting and Captioning services.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*,[37] issued on January 22, 2021. EPA reviewed its unions' agreements to identify and eliminate provisions influenced by four revoked EOs and will increase the focus on pre-decisional involvement and interest-based bargaining (IBB). In FY 2022, EPA will continue working to reset and repair a damaged relationship and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):

- (+$53.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$322.0) This net change includes a decrease for workers compensation, childcare subsidy, sign language services, and fees for the federal shared human resource systems and services provided by Department of Interior's Interior Business Center offset by an increase to strengthen agencywide capacity to quickly increase the recruitment and onboarding of employees in key offices and programs (i.e., environmental justice, climate, infrastructure programs, etc.).

- (+$265.0 / +0.8 FTE) This net program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes $121.0 thousand in payroll.

[37] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/.

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

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Science & Technology	$143,191.3	$133,000.0	$137,412.0	$4,412.0
Leaking Underground Storage Tanks	$520.6	$320.0	$327.0	$7.0
Inland Oil Spill Programs	$428.2	$664.0	$668.0	$4.0
Hazardous Substance Superfund	***$15,501.1***	***$16,463.0***	***$16,634.0***	***$171.0***
Total Budget Authority	$159,641.2	$150,447.0	$155,041.0	$4,594.0
Total Workyears	417.3	421.8	441.8	20.0

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."[38]

SHC has made a commitment to explore all possibilities to minimize and mitigate disproportionate, negative impacts and to foster environmental, public health, and economic benefits for overburdened communities. Improved tools as well as Superfund remedial technologies will directly support communities with environmental justice concerns and accelerate the understanding of the negative impacts Superfund sites pose for underserved communities. SHC also is making the commitment to emphasize remediation technologies that improve climate adaptation and climate resilience.

The SHC Research Program is one of six integrated and transdisciplinary research programs in EPA's Office of Research and Development. Each of the programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *SHC FY 2019-2022 StRAP* builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

SHC's research under the Superfund appropriation provides federal, regional, and community decision-makers with 1) engineering tools, methods, and information to assess current conditions at Superfund sites; 2) decision support tools to evaluate the implications of alternative remediation approaches and technologies, and reuse of sites; 3) the latest science to support policy development and implementation; and 4) rapid access to technical support through EPA's Superfund Technical

[38] 42 U.S.C. § 9660(b).

Support Centers--these centers recorded 144 technical support activities, giving assistance to 99 Superfund and RCRA sites, and responding to requests from all 10 EPA Regions in FY 2019.[39]

Recent Accomplishments of the SHC Research Program include:

- **Application of Passive Sampling for Making Management Decisions based on Contaminant Bioavailability at Contaminated Sediment Superfund Sites (Published in March 2021)[40]:** This research was performed to evaluate the use of passive sampling to assess the risk associated with petroleum hydrocarbon contaminated sediments and provide data for remediation decisions. The study investigated polycyclic aromatic hydrocarbons (PAHs) in Saint Jones River soils next to the Dover Gas Light Superfund site. The freely dissolved concentrations of total PAHs were estimated based on equilibrium partitioning and the passive sampling findings. Freely dissolved concentrations of PAHs showed greater toxicity with deeper sediments. Results indicate that natural clean sediments can be used to bury less contaminated sites whereas other techniques such as dredging could be focused on highly contaminated areas. This research provides an evidence base for remedial project managers to use in site clean-up decisions.

- **Strategies for Managing Risk due to Back Diffusion (Published in Winter 2021)[41]:** This review provides a state-of-the-science resource to assist in evaluating treatment options at sites where back diffusion has been identified as a significant factor. Back diffusion is backwards movement of contaminants into areas of relatively higher permeability that makes cleanup more challenging unless it is addressed in the remedial design. This research effort reviewed characteristics of, and remedial strategies used to manage, sites with contaminant plume persistence due to back diffusion. Remedial project managers can use the reported research results as a resource during the initial process of screening remedial technologies and strategies to help select those that hold the most promise and warrant further evaluation for application at a given site.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA research under SHC will support the Land and Emergency Management Program, regional offices, states, and tribes, by providing technical assistance and support to help characterize, remediate, and manage contaminated sites and groundwater, including overburdened communities. The tools developed under the SHC Research Program will help the Land and Emergency Management Program and the regional offices address complex contamination problems at Superfund, Resource Conservation Recovery Act (RCRA), and Brownfields sites in the United States. EPA research personnel and associated support staff also will collect data to model vapor intrusion in multicompartment and large buildings, sample and analyze contaminated groundwater and sediments at high priority sites (*e.g.* mining influenced waters), provide technical support to the Office of Land and Emergency Management (OLEM), the Regions and States to support decision making and expedite the remediation of Superfund sites and test innovative

[39] For additional information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=349724&Lab=CESER.
[40] For more information, please see: https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/ieam.4409?af=R.
[41] For more information, please see: https://ngwa.onlinelibrary.wiley.com/doi/epdf/10.1111/gwmr.12423.

technologies for site characterization and remediation. Scientific journal articles, datasets, models, and tools will be published to disseminate findings associated with the data.

Per- and polyfluoroalkyl substances (PFAS) are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities in understanding and managing risks associated with these chemicals. A significant challenge for risk managers at the state and local level is how to remove or treat PFAS at contaminated sites. Within the SHC Research Program, EPA aims to understand: environmental PFAS contamination and pathways of exposure for the public; how PFAS can be removed from the environment through safe destruction or degradation; the significant sources, fate and transport pathways, and exposures to humans and ecosystems; and the costs and effectiveness of different methods for removing and remediating PFAS in the natural and built environment. SHC is specifically researching analytical methods, human exposure, contaminated sites source zones, hard to treat streams such as landfill leachate, fate and transport of PFAS in groundwater, remediation performance (treatability and cost models), immobilization/stabilization of PFAS, and novel remedial technologies. This work is being done in collaboration with the Department of Defense through participation in their Strategic Environmental Research and Development Program.[42] EPA research under SHC also is focusing on end-of-life management of PFAS-containing materials (e.g., industrial waste, household waste) to ensure that PFAS from these materials do not impact the environment. This work provides technical support and assistance to states, tribes, and local communities on issues pertaining to ecological and human health risk assessment and site engineering challenges related to PFAS.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA's Research and Development Program on technical and management issues of its research programs. The SHC Research Program will continue to meet regularly over the next several years with the SHC Subcommittee of the BOSC to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement program[43] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory

[42] For more information about SERDP, please see: https://www.serdp-estcp.org/About-SERDP-and-ESTCP/About-SERDP.
[43] For more information on EPA's state engagement efforts, please see: https://www.epa.gov/research/epa-research-solutions-states.

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.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$90.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

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

- (+$78.0) This increase to SHC's Superfund Research Program will build capacity to help respond directly to the Superfund law requirements.

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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Research: Chemical Safety and Sustainability

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Science & Technology	$38,921.5	$37,482.0	$41,412.0	$3,930.0
Hazardous Substance Superfund	***$3,882.1***	***$12,824.0***	***$12,876.0***	***$52.0***
Total Budget Authority	$42,803.6	$50,306.0	$54,288.0	$3,982.0
Total Workyears	152.3	154.9	174.9	20.0

Program Project Description:

EPA's Health and Environmental Risk Assessment (HERA) Research Program is focused on the science of assessments that inform decisions made by EPA and others, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). HERA supports the risk assessment needs of the Agency's Superfund Program and regional risk assessors. With funding from Superfund, the HERA Research Program provides Provisional Peer-Reviewed Toxicity Values (PPRTVs) and 'fit-for-purpose' assessments to respond to emergent scenarios, and technical support on the application of human health and ecological risk assessment practices at hazardous waste sites for Superfund. These assessment tools and activities support risk-based management decisions at contaminated Superfund and hazardous waste sites.

The HERA Research Program is one of six integrated and transdisciplinary research programs in EPA's Office of Research and Development. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *HERA FY 2019-2022 StRAP* builds upon prior Human Health Risk Assessment StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

HERA supports the Agency's mission to protect human health and the environment by identifying and characterizing the health hazards of chemicals of concern to the Superfund Program and responding to technical requests on topics relevant to human health or ecological risk assessment at hazardous waste sites. Scientists in the HERA Research Program synthesize available scientific information on the potential health and environmental impacts of exposures to individual chemicals and chemical mixtures in the environment. PPRTVs are an important source of toxicity information and toxicity values to ensure improvements in human health and the environment in communities near Superfund sites.

Priorities for PPRTV development are based on the needs of the Agency's Land and Emergency Management Program, with input from Agency regional offices, and are evaluated annually. HERA research areas include applying new data streams, read-across approaches and

computational tools, enhancement of supporting data/knowledge bases, and efficiency of derivation for PPRTV values.

There are over 1,300 Superfund sites on the National Priorities List.[44] 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. The HERA Research Program anticipates environmental contamination issues and develops new assessment approaches to enhance rapid response and screening capabilities and to augment toxicity value derivation procedures for health assessments.

In FY 2022, HERA research will continue to provide information needed to inform Agency decisions about chemicals, with a special emphasis on per- and polyfluoroalkyl substances (PFAS). PFAS comprise of a large class of fluorinated substances of growing concern, and EPA is committed to supporting states, tribes, and local communities in understanding and managing risks associated with these chemicals.[45] HERA research on PFAS represents a major integrative effort that will provide systematic information on a broad range of topics. HERA scientists will continue to identify, curate, evaluate, and extract available physicochemical, structural, exposure, and toxicological data from the published and gray literature to inform study design, categorization approaches, and interpretation of emerging studies.

Recent Accomplishments of the HERA Research Program include:

- **PPRTV Documents:** In FY 2021, the HERA Research Program plans to complete nine PPRTV documents[46] based on the needs and priorities of EPA's Superfund Program. These include, trans-crotonaldehyde, benzo(e)pyrene, 1-bromo-2-chloroethane, 2,3-toluenediamine, 3,4-toluenediamine, and 3,5-dinitroaniline.

- **'Fit-for-purpose' Assessment Products:** In April 2021, HERA released the final *Human Health Toxicity Values for Perfluorobutane Sulfonic Acid (CASRN 375-73-5) and Related Compound Potassium Perfluorobutane Sulfonate (CASRN 29420-49-3)*[47], delivering on EPA's commitment to address PFAS in the environment. This assessment for PFBS updates and replaces the 2014 PPRTV assessment for PFBS.

- **Technical Support:** In FY 2021, HERA responded to several requests for scientific support on human and ecological assessment via the Superfund Health Risk Technical Support Center and Ecological Risk Assessment Support Center[48]. These requests included assistance with employing new approach methods, review of probabilistic risk assessment models, and continued stakeholder engagement on complex science to address needs of Superfund sites across the United States. For the remainder of FY 2021, HERA anticipates providing additional site-specific technical support as needed, as well as completing a state-of-the-science report to discuss technical issues for ecological risk assessment at contaminated sites, entitled *Update on the Benefits of PCB Congener-Specific Analyses*.

[44] For more information, please see: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.
[45] For more information, please see: https://www.epa.gov/pfas/pfas-community-engagement.
[46] For more information, please see: https://www.epa.gov/pprtv.
[47] For more information, please see: https://www.epa.gov/pfas/learn-about-human-health-toxicity-assessment-pfbs.
[48] For more information, please see: https://www.epa.gov/land-research/epas-technical-support-centers.

FY 2022 Activities and Performance Plan:

In FY 2022, the HERA Research Program's work will focus explicitly on efforts integral to achieving the Agency's priorities and informing EPA's implementation of key environmental regulations. Examples of this work include:

- **PFAS Research:** PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities in understanding and managing risks associated with these chemicals. Decision-making on PFAS chemicals is hindered by a limited number of standard toxicity values. There are still large numbers of PFAS, of high interest to stakeholders, that currently have no federal published, peer-reviewed toxicity values. Within the HERA Research Program, EPA is prioritizing additional PFAS for development of peer-reviewed toxicity values.

  In FY 2022, PFAS chemicals will be acquired to expand the existing PFAS physical library of compounds to include those PFAS of interest to Agency partners and stakeholders. A web-based PFAS-specific dashboard will be developed to facilitate access to a common, publicly available, and transparent PFAS information resource. PFAS fate, transport, occurrence, and persistence in the environment and in consumer products will be evaluated to help understand exposure scenarios. A tiered toxicity testing strategy will be executed which utilizes new approach methods (NAMs) to evaluate single PFAS chemicals and mixtures in a high throughput manner, followed by targeted in vivo testing for chemicals identified as priorities. This testing approach will include several systems-specific toxicity tests, including developmental neurotoxicity, thyroid toxicity, immunotoxicity, and developmental and reproductive toxicity. Various types of modeling will be used to translate in vitro result into in vivo outcomes and will include the use of adverse outcome pathway (AOP) models that link in vitro results to outcomes relevant to regulatory objectives and in silico predictive toxicity models.

  In the ecological domain, HERA is developing multispecies approaches to evaluate species sensitivity differences across taxa to inform aquatic risk benchmarks. Furthermore, work continues to determine the bioaccumulation of PFAS in aquatic species which also is relevant to human health in the context of exposure via fish consumption. This work is being done in collaboration with the National Institute of Environmental Health Sciences: National Toxicology Program. Resources requested in FY 2022 will build upon the research foundation formed from completed work outlined in the PFAS Action Plan.

- **PPRTV Assessments**: In FY 2022, the HERA program will provide at least eight additional PPRTV assessments as prioritized by EPA's Land and Emergency Management Program.

- **Portfolio of Assessment Products:** In FY 2022, the HERA Program will complement the PPRTVs by providing additional 'fit-for-purpose' assessment products for priority chemicals, such as for up to six perfluorinated compounds as prioritized by the Land and Emergency Management Program. Having modernized its assessment infrastructure, HERA will use evidence mapping to provide a better understanding of the extent and nature

of evidence available to address Agency needs (i.e., 'fit for purpose'). This approach is expected to improve throughput for PPRTV development.

- **Linking Databases and Management Tools:** In FY 2022, the HERA Program will continue to collaborate with the Chemical Safety for Sustainability (CSS) Research Program to link the architecture of HERA's assessment databases and literature management tools, including Health and Environmental Research Online[49] and the Health Assessment and Workplace Collaborative[50] with the CompTox Chemicals Dashboard[51] being developed in CSS.

- **Rapid Technical Support:** In FY 2022, the HERA Program will continue essential technical assistance across EPA to provide rapid technical support to programs and regions. These activities will provide expedited technical support for evaluating chemical-specific exposures at Superfund and contaminated sites, as well as incorporating case-specific information related to urgent situations.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The HERA Research Program and the HERA Subcommittee of the BOSC will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement[52] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health 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's commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The

[49] For more information, please see: https://hero.epa.gov/hero/.
[50] For more information, please see: https://hawcprd.epa.gov/.
[51] For more information, please see: https://comptox.epa.gov/dashboard.
[52] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety for Sustainability Program under the S&T appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$28.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$24.0) This program change is an increase to the Health and Environmental Assessment program that will help in advancing science assessments, such as IRIS, as well as analytical approaches for the applications of risk assessments.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund Cleanup

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Hazardous Substance Superfund	***$203,758.9***	***$190,000.0***	***$195,489.0***	***$5,489.0***
Total Budget Authority	$203,758.9	$190,000.0	$195,489.0	$5,489.0
Total Workyears	269.0	244.7	244.7	0.0

Program Project Description:

The Emergency Response and Removal Program (Superfund 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. 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.[53] Further, this program is responsible for the Agency's only Primary Mission Essential Function. Superfund Removal cleanups vary in complexity and contain a wide variety of contaminants including mercury, lead, and asbestos.[54]

Over the last 10 fiscal years (2011-2020), EPA completed or oversaw more than 2,872 Superfund removal actions across the country. Superfund Removal sites can be found in remote rural areas as well as large urban settings. Approximately 11 million people, or 3 percent of the population. live within three miles of a Superfund Removal site where EPA completed a removal action in FY 2016.[55] In addition, over 41 percent of removal completions in FY 2019-2020 were in communities with populations over the 80th percentile for being people of color, low income, or had less than a high school education.[56]

The Superfund 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 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

[53] For additional information, please refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.
[54] Data from US EPA Superfund Enterprise Management System.
[55] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes (1) site information as of the end of FY 2016 and (2) census data from the 2011-2015 American Community Survey.
[56] Data from US EPA Superfund Enterprise Management System and US EPA EJ Screen.

communities. Restoration of Superfund Removal sites directly support President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).[57]

EPA Federal On-Scene Coordinators (OSCs) make up the core of the Superfund Removal Program. These trained and equipped EPA personnel respond to, assess, mitigate, and clean up environmental releases regardless of the cause. States, local, and tribal communities rely upon the OSC's expertise and support to deal with environmental emergencies that are beyond their capabilities and resources.

FY 2022 Activities and Performance Plan:

In FY 2022, EPA is requesting an increase of approximately $5.5 million for the Superfund Removal Program. These additional resources will support the removal of hazardous waste from communities, with an emphasis on advancing environmental justice and equitable outcomes. In addition, this investment is part of the Administration's $1.8 billion targeted to advance environmental justice in tandem with climate work.

In FY 2022, the Superfund 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 to set up organizational systems that help with the long-term strategic planning and response efforts.

Performance Measure Targets:

(PM 137) Number of Superfund removals completed.	**FY 2021 Target**	**FY 2022 Target**
	141	183

[57] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$467.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$5,022.0) This program change increases support for the removal of hazardous waste from communities, with an emphasis on advancing environmental justice and equitable outcomes.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 104, 105, 106; Clean Water Act (CWA); and Oil Pollution Act (OPA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Hazardous Substance Superfund	***$8,824.2***	***$7,700.0***	***$7,839.0***	***$139.0***
Total Budget Authority	$8,824.2	$7,700.0	$7,839.0	$139.0
Total Workyears	32.6	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 Department of Homeland Security and other federal agencies 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 2022 Activities and Performance Plan:

EPA continuously works to improve its management of emergency response assets to be better prepared to handle large unprecedented incidents which 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, and provides technical assistance to industry, states, tribes, and local communities. Specific activities include:

- Chair the NRT[58] and co-chair the 13 RRTs. The NRT and RRTs are the only active environmentally focused interagency executive committees addressing oil and hazardous substance emergencies. They serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams.

[58] For additional information, please refer to: https://www.nrt.org/.

- 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[59] which provides the approach to manage incidents and works hand in hand with the NRF.

Performance Measure Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$73.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$66.0) This program change increases essential support for core program work.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Robert T. Stafford Disaster Relief and Emergency Assistance Act.

[59] For additional information, please refer to: http://www.fema.gov/national-incident-management-system.

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Hazardous Substance Superfund	***$617,575.2***	***$589,000.0***	***$882,400.0***	***$293,400.0***
Total Budget Authority	$617,575.2	$589,000.0	$882,400.0	$293,400.0
Total Workyears	935.6	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 investigating contamination and implementing long-term cleanup remedies. The program also oversees response work conducted by potentially responsible parties (PRPs) at National Priorities List (NPL) and Superfund Alternative Approach (SAA) sites.

By cleaning up and returning land to productive use, the Superfund Remedial Program improves the health and livelihood of all Americans and supports the Administration's goal to reduce the effects of exposure to Superfund site contamination. Based on an analysis of recent fiscal year data more than 50 percent of site-specific obligations were obligated to Superfund sites in disadvantaged communities. In the same period, more than half of the Superfund Program's accomplishments under the Human Exposure Environmental Indicator and Sitewide Ready for Anticipated Use measures were at sites in disadvantaged communities.

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 for all Americans by returning Superfund sites to productive use. Reuse and Restoration of Superfund NPL sites directly support President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).[60] As of FY 2020, EPA data show that approximately 1,000 Superfund sites are in reuse—more than half the total number of sites placed on the NPL over the program's existence. EPA has data on more than 9,900 businesses at 632 of these sites. In FY 2020 alone, these businesses generated $63.3 billion in sales. These businesses employed more than 227,000 people who earned a combined income of over $16 billion. Over the last eight years, these businesses generated at least $384 billion in sales.[61] In FY 2020, EPA made 34 Superfund sites ready for anticipated use.

While conducting cleanup at NPL and SAA sites, Superfund remedial construction projects can enhance our national infrastructure while addressing harmful exposures. Cleanup work lowers human health risk; for example, recent research indicates that Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within 1.24

[60] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.
[61] For more information on Redevelopment Economics, please refer to: https://www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites#national.

miles (2 kilometers) of a Superfund NPL site where lead is a contaminant of concern.[62] Cleanup work under the Superfund Remedial Program also improves property values. A study conducted by researchers at Duke University and the University of Pittsburgh found that residential property values within 3 miles (4.8 kilometers) of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and deleted from the NPL.[63]

FY 2022 Activities and Performance Plan:

In FY 2022, EPA will prioritize resources to execute its non-delegable, federal responsibility to remediate sites and protect human health, welfare and the environment. The Superfund Remedial program endeavors to maximize the use of special account resources collected from PRPs for site-specific response actions as stipulated in settlement agreements. More than half of non-federal sites on the final NPL do not have an associated open special account and must rely on annually appropriated funds.

In FY 2022, an investment of an additional $293 million in the Superfund Remedial Program will enable the start of cleanup work at more than 20 NPL sites with new remedial construction projects currently awaiting funding. This investment also will accelerate cleanup work at more than 15 NPL sites with large, ongoing construction projects, which require a substantial funding allocation over multiple years, and allow for enhanced engagement at lead sites. In addition, these additional resources are part of the Administration's $1.8 billion targeted to advance environmental justice in tandem with climate work.

In FY 2022, EPA will support the cleanup of Per- and Polyfluoroalkyl Substances (PFAS) and EPA's Council on PFAS. The council will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; and engage with affected states, tribes, communities, and stakeholders.

Performance Measure Targets:

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.	**FY 2021 Target**	**FY 2022 Target**
	51	51

(PM 151) Number of Superfund sites with human exposures brought under control.	**FY 2021 Target**	**FY 2022 Target**
	10	15

(PM 170) Number of remedial action projects completed at Superfund sites.	**FY 2021 Target**	**FY 2022 Target**
	80	80

[62] Details can be found at https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series.

[63] Shanti Gamper-Rabindran 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, http://dx.doi.org/10.1016/j.jeem.2012.12.001.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$293,400.0) This program increase will enable the start of cleanup work at more than 20 NPL sites with new remedial construction projects currently awaiting funding. This investment also will accelerate cleanup work at more than 15 NPL sites with large, ongoing construction projects, which require a substantial funding allocation over multiple years.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Hazardous Substance Superfund	***$23,280.8***	***$21,800.0***	***$22,189.0***	***$389.0***
Total Budget Authority	$23,280.8	$21,800.0	$22,189.0	$389.0
Total Workyears	110.8	109.7	109.7	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. Program responsibilities include: 1) inventory and assess potentially contaminated sites; 2) implement protective remedies; 3) facilitate early transfer of property; and 4) ensure ongoing protectiveness of completed cleanups.

The Federal Facility NPL sites at which other Federal agencies (OFAs) are the lead agency and EPA is the lead for oversight are among the largest in the Superfund Program. Federal Superfund sites may include specialized environmental contaminants such as munitions and radiological waste, and contaminants of emerging concern such as per-and polyfluoroalkyl substances (PFAS). EPA jointly selects site remedies with OFAs and uses its oversight authority to provide an independent assessment of federal cleanups, to ensure work being conducted by the OFAs comports with site cleanup plans. To ensure efficiencies and consistent approaches to cleanup, the Program collaborates with OFAs and state, local, and Tribal governments. There are 175 Federal Facility sites on the NPL. The sites result in more than $8 billion per year expended by OFAs under EPA oversight. The resulting cleanup, restoration, and reuse of Federal Facility sites contributes significantly to Superfund program accomplishments. In FY 2020, the Program designated remedial decisions at 54 federal facility sites to address environmental contamination. The Program also achieved 37 Remedial Action Project Completions and reviewed 39 Five-Year Reviews to confirm protective remedies remain in place.

The Superfund Federal Facilities Program supports President Biden's Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* (January 20, 2021) by recognizing and working to repair inequities that serve as barriers to equal opportunity in the Federal Facility Superfund Program. By working to improve the health and livelihood of communities through the cleanup of sites, the Program supports the return of land to productive use. Over 52 percent of Federal Facility NPL sites are in disadvantaged communities. Cleaning up contaminated sites at Federal Facilities can serve as a catalyst for economic growth and community revitalization.

The Superfund Federal Facilities Program has successfully worked with its partners to facilitate the redevelopment of Federal Facility sites across the country. Reuse and Restoration of Federal

Facility NPL sites directly support President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).[64] Some examples of redevelopment include ecological preserves, recreational areas, cultural/historical resources, public transit infrastructure, and alternative energy sources. A 2020 economic analysis of 45 Federal Facility NPL sites identified over 2,000 businesses that generated $11 billion in annual sales, provided over 189,000 jobs and $14 billion in estimated annual employment income.[65]

FY 2022 Activities and Performance Plan:

In FY 2022, the Superfund Federal Facilities Program, as part of its non-delegable statutory oversight responsibility will implement the Administration's PFAS priority by establishing best practices for PFAS cleanups, and working to keep pace with the growing number of PFAS cleanups at Department of Defense (DOD) and other Federal Facility sites. EPA will work to oversee cleanup efforts where PFAS releases have been identified as a risk to human health. This work supports the implementation of EPA's Council on PFAS. Currently, the Program is engaged at 96 Federal Facility NPL sites with PFAS detections, ensuring consistent and protective responses. The Program also will prioritize and continue to partner with OFA's, state, local, and tribal governments, and communities to limit human exposure to potentially harmful levels of lead (Pb) in the environment.

EPA will continue to oversee complex cleanups at Federal Facility NPL sites, such as contamination in groundwater, munitions and explosives of concern, contaminants of emerging concern, and contamination from legacy nuclear weapons development and energy research. While Department of Energy (DOE) has completed cleanup work at many of its sites, DOE estimates that the remaining legacy Cold War sites will take decades to complete due to groundwater, soil, and waste processing. Similarly, the DOD inventory includes sites that contain chemical and explosive compounds which require special handling, storage, and disposal practices, as well as cleanup. EPA will continue to provide oversight and technical assistance at DOD's military munitions response sites and support DOD's development of new technologies to streamline cleanups.

To ensure the long-term protectiveness of the remedies, the Agency will continue monitoring, overseeing progress, and improving the quality and consistency of Five-Year Reviews conducted at federal 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 the EPA's role is to concur or make its own independent protectiveness determination. EPA has been working collaboratively with our federal partners to improve the technical quality, timeliness, and cost of the five-year review reports and to ensure engagement with pollution-burdened and underserved communities. In FY 2022, the Superfund Federal Facilities Program will review approximately 40 five-year review reports to fulfill statutory requirements and to inform the public about the protectiveness of remedies.

In FY 2022, the Superfund Federal Facilities Program will work with OFAs to target the highest risk sites and focus on activities that bring human exposure and groundwater migration under control. In addition, EPA manages the Federal Agency Hazardous Waste Compliance Docket

[64] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.
[65] For additional information, please refer to: https://www.epa.gov/fedfac/redevelopment-economics-federal-facilities.

(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.[66] The Docket is updated semi-annually and has nearly 2,400 facilities listed.

Performance Measure Targets:

Work under this program supports performance results in the Superfund Remedial Program under the SF appropriation.

FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+$205.0) This net change to fixed and other costs the recalculation of base payroll costs for existing FTE, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$184.0) This program change increases core Superfund Federal Facilities Program work, such as oversight of PFAS investigations and cleanup.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

[66] EPA developed a website called FEDFacts, where all sites are mapped and linked to available environmental information, which may be found at: https://www.epa.gov/fedfacts.

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 or parties.

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 a 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 current 1,327 Superfund sites listed as final on the National Priorities List, more than half do not have special account funds available for use. 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. Once all site-specific response work pursuant to the settlement agreement 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.

FY 2020 Special Account Activity

Since the inception of special accounts through the end of FY 2020, EPA has collected approximately $7.6 billion from parties and earned approximately $666.7 million in interest. Approximately 58 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 42 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 over $43.4 million to the Superfund Trust Fund. As of the end of

FY 2020, over $4.3 billion has been disbursed for site response actions and approximately $354.4 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 2020, EPA deposited more than $203.9 million into special accounts and disbursed over $292.0 million from special accounts (including reclassifications). At the end of FY 2020, the cumulative amount available in special accounts was approximately $3.47 billion.

Special accounts vary in size. A limited set represent the majority of the funds available. At the end of FY 2020, 4 percent of open accounts had greater than $10 million available and approximately 70 percent of all available funds in open accounts. There are many accounts with lower available balances. 71 percent of all open accounts with up to $1 million available represent approximately 6 percent of available funds in all open accounts.

The balance of approximately $3.47 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. The timeframe required to implement a given remedial action is driven largely by 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, at sites where waste has been left in place.

Over the past five fiscal years, EPA has obligated or disbursed more than $1.3 billion from special accounts (excluding reclassifications), resulting in the Superfund Program performing a significant amount of work in addition to work the Agency performed using annually appropriated funds. In FY 2020, EPA disbursed and obligated approximately $236.6 million from special accounts (excluding reclassifications) for response work at more than 750 Superfund sites. Site-specific examples of this work include $34.7 million to support work at the New Bedford Harbor site in Massachusetts, $13.5 million for the Cornell Dubilier Electronics Inc. site in New Jersey, and $15.8 million for the Atlantic Wood Industries, Inc. site in Virginia. In the absence of special account funds, appropriated funds would have been necessary for these response actions to be funded. In other words, EPA was able to fund approximately $236.6 million in response work at sites in addition to the work funded through appropriated funds obligated or disbursed in FY 2020.

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 2020 program activity, and planned multi-year uses of the available balance. Exhibit 2 provides the prior year (FY 2020), current year (FY 2021), and estimated future budget year (FY 2022) activity for special accounts. Exhibit 3 provides prior year data (FY 2020) by EPA regional offices to exhibit the geographic use of the funds.

Exhibit 1: Summary of FY 2020 Special Account Transactions and Cumulative Multi-Year Plans for Using Available Special Account Funds

Account Status[1]	Number of Accounts
Cumulative Open	1,130
Cumulative Closed	408
FY 2020 Special Account Activity	**$ in Thousands**
Beginning Available Balance	$3,446,444.3
FY 2020 Activities	
+ Receipts	$203,902.0
- Transfers to Superfund Trust Fund (Receipt Adjustment)	($7,618.5)
+ Net Interest Earned	$81,469.2
- Net Change in Unliquidated Obligations	$33,996.6
- Disbursements - For EPA Incurred Costs	($266,146.3)
- Disbursements - For Work Party Reimbursements under Final Settlements	($4,431.0)
- Reclassifications	($21,511.6)
End of Fiscal Year (EOFY) Available Balance[2]	$3,466,104.7
Multi-Year Plans for EOFY 2020 Available Balance[3]	**$ in Thousands**
2020 EOFY Available Balance	$3,466,104.7
- Estimates for Future EPA Site Activities based on Current Site Plans[4]	$3,324,040.0
- Estimates for Potential Disbursement to Work Parties Identified in Final Settlements[5]	$72,367.6
- Estimates for Reclassifications for FYs 2020-2022[6]	$37,051.3
- Estimates for Transfers to Trust Fund for FYs 2020-2022[6]	$29,864.1
- Available Balance to be Planned for Site-Specific Response[7]	$2,781.7

[1] FY 2020 data is as of 10/01/2020. The Beginning Available Balance is as of 10/01/2019.
[2] Numbers may not add due to rounding.
[3]Planning data were recorded in the Superfund Enterprise Management System (SEMS) as of 10/30/2020 in reference to special account available balances as of 10/01/2020.
[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 2020 – FY 2022[1]

	FY 2020 Actuals	FY 2021 estimate	FY 2022 estimate
	$ in Thousands		
Beginning Available Balance	$3,446,444.3	$3,466,104.7	$3,643,330.9
Receipts[2]	$203,902.0	$350,000.0	$350,000.0
Transfers to Trust Fund (Receipt Adjustment)[3]	($7,618.5)	($4,041.4)	($4,041.4)
Net Interest Earned[4]	$81,469.2	$75,000.0	$100,000.0
Net Obligations[3,5]	($236,580.7)	($226,952.8)	($226,952.8)
Reclassifications[3]	($21,511.6)	($16,779.6)	($16,779.6)
End of Year Available Balance[6]	$3,466,104.7	$3,643,330.9	$3,845,557.1

[1] FY 2020 data is as of 10/01/2020. The Beginning Available Balance is as of 10/01/2019.
[2] The estimates for Receipts are in line with more typical years.
[3] The estimates for Transfers to Trust Fund, Net Obligations, and Reclassifications are based on a three-year historical average.
[4] FY 2020 net interest earned includes interest earned from an investment which matured in September 2019. Net interest earned in FY 2021 and FY 2022 are estimated utilizing economic assumptions for the FY 2022 President's Budget.
[5] Net Obligations reflect special account funds no longer available for obligation, excluding reclassifications and receipts transferred to the Trust Fund.
[6] Numbers may not add due to rounding.

Exhibit 3: FY 2020 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	$204,986.0	$24,542.5	($1,000.0)	$5,811.1	($40,648.9)	($6,584.9)	$187,105.8
Region 2	$557,328.4	$52,316.0	$0.0	$13,797.2	($50,399.0)	($2,705.7)	$570,336.8
Region 3	$188,380.5	$10,592.8	($114.3)	$4,344.6	($27,502.5)	($4,325.3)	$171,375.8
Region 4	$70,916.5	$2,609.5	($6,060.2)	$1,142.3	($1,812.2)	($3,393.1)	$63,402.9
Region 5	$399,925.1	$21,065.8	($37.1)	$9,503.4	($14,453.7)	($1,261.5)	$414,742.0
Region 6	$122,755.1	$11,076.6	$0.0	$2,870.6	($17,449.6)	($242.4)	$119,010.3
Region 7	$150,153.3	$12,549.1	$0.0	$3,950.3	($17,590.3)	($588.5)	$148,474.0
Region 8	$272,731.3	$9,198.9	($90.6)	$6,490.1	($20,358.8)	($1,200.9)	$266,770.0
Region 9	$1,328,407.0	$37,881.8	($316.2)	$29,497.0	($23,299.9)	($348.9)	$1,371,820.8
Region 10	$150,861.1	$22,068.9	$0.0	$4,062.5	($23,065.6)	($860.4)	$153,066.5
Total	$3,446,444.3	$203,902.0	($7,618.3)	$81,469.2	($236,580.7)	($21,511.6)	$3,466,104.7

[1] FY 2020 data is as of 10/01/2020. The Beginning Available Balance is as of 10/01/2019.
[2] Numbers may not add due to rounding.