

FY 2023



OFFICE OF RESOURCE CONSERVATION AND RECOVERY (ORCR)

Accomplishments Report



ORCR's mission is to protect human health and the environment by promoting the conservation of resources, ensuring proper waste management, preventing harmful exposure, and overseeing the cleanup of land for productive use. We do this by establishing and implementing regulatory standards, incentive-based programs, and best practices in collaboration with communities, governments, businesses, and other organizations. ORCR implements the Resource Conservation and Recovery Act.

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Letter from the Director

Dear colleagues and friends of ORCR,

As I reflect on the amazing work accomplished in fiscal year 2023, I am struck by the immense collaboration we achieve working alongside Tribes, states, EPA Regions, other EPA offices, other federal agencies, and many external organizations. I am grateful for the passion of colleagues at EPA and all our partners for protecting the environment and public health.

This year, we accomplished a significant amount of work on the Administration's priorities of addressing climate change and environmental injustice. Together, we are empowering people, communities, and organizations to be forces for change in the face of the climate crisis.

We completed all FY 2023 Climate Adaptation Implementation Plan commitments, developed a [memorandum](#) on how to incorporate climate change into the RCRA corrective action process, and helped two municipalities and three Tribes develop Disaster Debris Management Plans. We presented to our partners on current climate work 12 times, including outreach to industry and regulators about our new [Sea Level Rise Visualization Tool](#).

We are protecting communities from pollution and advancing environmental justice through our work on coal ash. When we found that the proposed Alabama permit program was less protective of people and waterways than required by federal regulations, we issued a [proposed denial of Alabama's Coal Combustion Residuals permit program](#). We also issued a [proposed rule for legacy CCR surface impoundments at inactive power plants](#). The proposed rule requires that these impoundments meet most existing requirements for inactive CCR surface impoundments at active facilities. In addition, we proposed requirements for CCR management units at regulated CCR facilities. This proposal continues EPA's commitment to protecting communities, groundwater, waterways, drinking water, and the air from CCR contamination.

In the category of funding, we implemented the [Solid Waste Infrastructure for Recycling grant program](#), including funding opportunities for [states and territories](#), [communities](#), and soon [Tribes](#). We will also soon implement the [Recycling Education and Outreach grant program](#). The SWIFR grant program is included in the [Justice40 Initiative](#), which mandates that at least 40% of the benefits of certain federal investments flow to disadvantaged communities. Our EPA regional colleagues have been hugely supportive of getting each of these grant programs off the ground, not only concerning staffing the review of applications but also with issuing more than 40 regional amplification press releases and leading and staffing many events. [Our press release](#) announcing the awards in September had a potential reach of more than one billion people, thanks to phenomenal news coverage.

We also launched the CCR state and Tribal grant program, which will help support states as they create and manage their own CCR programs. We distributed over \$5 million in noncompetitive funding to states for EPA-approved CCR programs. Twenty states received funds in FY 2023. We continued the RCRA State Implementation Support Grant, which funds the Association of State and Territorial Solid Waste Management Officials, a key partner with EPA that helps maintain and strengthen our partnerships with states, including issuing and renewing permits to a portion of the 1,300 permitted hazardous waste treatment, storage, and disposal facilities and processing permit modifications to keep pace with evolving business practices, technology, and market conditions. We also launched a new [RCRA Community Engagement and Technical Assistance program](#). It assists communities with addressing environmental and health concerns related to waste management by providing contractor support, resources, and information assistance.

In our series of strategies to create a circular economy for all, we continued the implementation of work under the [National Recycling Strategy](#), posted for public comment a new [Draft National Strategy to Prevent Plastic Pollution](#), and moved forward several projects to address food waste. We created many resources

to drive behavior change to advance a circular economy - the [Model Recycling Program Toolkit](#) and [social marketing toolkits](#) to encourage composting and reduce food waste. We created maps and mapping tools such as the [Recycling Infrastructure and Market Opportunities Map](#) and the [Excess Food Opportunities Map](#) (with EJ layers from EPA's EJScreen). ORCR also issued a [memorandum on lithium battery recycling](#) in May 2023, explaining how lithium batteries are being recycled to facilitate the building of a circular economy for the critical materials that are powering our transition away from fossil fuels.

Our RCRA Corrective Action Program focused on continued progress implementing the five [2030 Corrective Action Goals](#) for cleaning up contamination at RCRA hazardous waste treatment, storage, and disposal facilities. We made significant progress toward the five-year long-term performance goal for 425 more RCRA corrective action facilities meeting the Ready for Anticipated Use milestone by 2026, achieving 118 facilities in FY 2023, surpassing our goal of 100 facilities for the year. Further, we submitted a draft proposed rule for interagency review to the Office of Management and Budget that would improve implementation of the existing requirements to evaluate and implement safe and available alternatives to open burning/open detonation.

As part of implementing the Polychlorinated Biphenyl Cleanup and Disposal Program under the Toxic Substances Control Act, we published a [final rule in the Federal Register](#) to address several issues related to the extraction and determinative methods used to characterize and verify the cleanup of PCB waste, added provisions to facilitate the cleanup of spills that occur during emergency situations, and strengthened the performance-based disposal option for PCB remediation waste by adding explicit cleanup provisions.

We celebrated the fifth birthday of e-Manifest and continued our important work increasing the adoption of e-Manifest, including issuing a policy to allow personnel to execute electronic signatures through their employees or contractors who are remotely located from the hazardous waste shipment.

In FY 2023, our international work advanced equities on many fronts, including helping to negotiate a new global instrument aimed at eliminating plastic pollution, our work on marine litter, as well as our work on Basel e-waste amendments. We expanded EPA's [Solid Waste Management Toolkit for Decision-Makers in Developing Countries](#) and translated the materials into six more languages to increase accessibility and further disseminate the toolkit around the world. Additionally, ORCR processed over 1,000 import notices from and over 1,000 export notices to other countries through the RCRAInfo Waste Import Export Tracking System launched in FY 2022 and hosted the RCRAInfo National Users Conference, offering 70 sessions across four days for more than 160 state, regional, and EPA Headquarters personnel.

We provided economic support in the development of 10 rules and other projects and provided risk analysis support for multiple coal combustion residual regulatory actions, beneficial use petitions, novel leaching test methods, and groundwater modeling. We processed over 100 funding actions, hired 11 new staff persons, started four additional hiring actions, and processed 15 other actions for people who were retiring or leaving. In FY 2023, ORCR staff received an impressive 14 Agency awards, 53 EPA Office of Land and Emergency Management awards, and 114 ORCR awards. We responded to over 150 inquiries from the press, published seven press releases, and continued to manage over 2,000 webpages that receive millions of page views.

It is incredibly rewarding work that we achieve together. We continue to protect human health and the environment through resource conservation, proper waste management, prevention of harmful exposures, and oversight of the cleanup of land for productive use.

I thank you all for helping us with these immensely impactful accomplishments. I look forward to achieving even more next year!



Carolyn Hoskinson
Director

Executive Summary: Making Progress on Key Issues

Prioritizing and Organizing Around Environmental Justice

Throughout FY 2023, we made substantial strides in our commitment to advancing the principles of EJ and supporting the President's Executive Orders and the Administration's strategic goals. ORCR has 13 projects in the ORCR EJ Action Plan, of which nine projects are also included in the OLEM EJ Action Plan. Among these projects are tools that EPA Regions can use to integrate EJ considerations into their work.

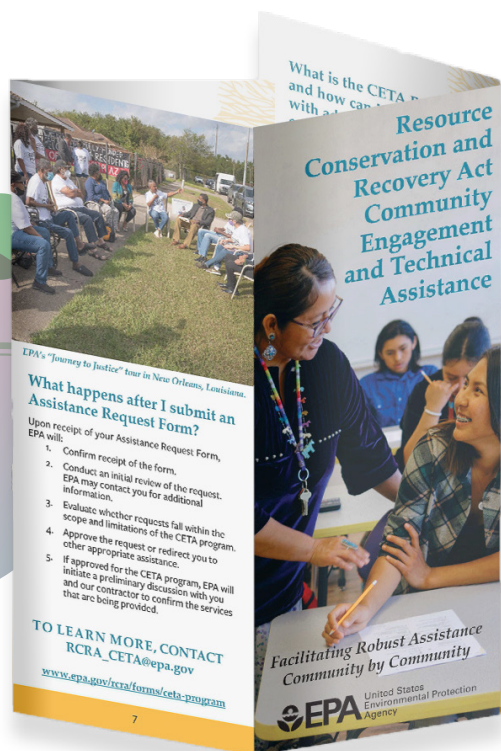
ORCR's Environmental Justice Work Group ensures continuous oversight of our progress on these projects and assists with the organization and presentation of monthly updates. One notable achievement of the work group in FY 2023 was the launch of the monthly EJ Moment for ORCR. Its purpose is to help staff develop insights to foster a deeper comprehension of what EJ entails and how it impacts people and communities.

We also achieved a significant milestone with the development of the Good Governance Technical Assistance Tool. We piloted this innovative tool during FY 2023, specifically as part of a CCR

outreach event, and refined the tool based on feedback from its practical use. The core objective of the Good Governance Project is to provide the public with effective points of contact to address their concerns, whether they are in or outside RCRA's purview. When possible, people are directed to contacts at organizations with jurisdiction over their specific issues. The scope of the Good Governance database is extensive. It has 1,277 state, federal, and interagency contacts along with 111 technical assistance tools spanning various environmental health and public needs areas, such as flooding, spills, emergency response, coal ash, and climate change, among others.

We also launched the [RCRA Community Engagement and Technical Assistance Program](#). It assists communities, addressing environmental and health concerns related to waste management by providing contractor support, resources, and information assistance. These services empower communities to develop informed opinions and conduct independent analysis about their RCRA waste-related concerns. Community engagement and technical assistance services range from providing support for community meetings to compiling summary information of technical and scientific documents in plain language. In addition, the program supports grassroots participation and fosters a collaborative working space for EPA and communities.

ORCR also worked with EPA Regions and the Office of General Counsel to develop draft guidance on how to consider EJ and climate change impacts





The Good Governance database has 1,277 state, federal, and interagency contacts along with 111 technical assistance tools spanning various environmental health and public needs areas.

in the RCRA permitting and PCB approval processes. These draft guidance documents will be published for public comment in FY 2024.

In addition, we prioritized the development of EJ guidance to ensure state activities address EJ concerns. We formed a work group comprising EPA headquarters and regional staff to explore potential revisions of RCRA hazardous waste state grant terms and conditions to better prioritize and support state activities to address EJ concerns. We developed draft guidance to provide direction to regional offices and states about including requirements and commitments in state grant workplans to incorporate EJ concerns. EPA engaged with and informed states about our progress. The guidance will be available to EPA Regions to incorporate into FY 2025 work plans, which will be negotiated during FY 2024.

Creating More Resources to Educate Partners about Climate Adaptation

In FY 2023, ORCR stepped up investment in climate change work by bringing a Senior Climate Advisor onboard for a one-year detail and launching a national RCRA and PCBs Climate Change Team. Together with OLEM's Climate Coordinating Committee, ORCR climate change staff completed training for internal staff, developed a new set of climate change webpages for release in FY 2024, and collaborated on two pilot RCRA climate vulnerability assessments. We successfully completed all FY 2023 climate adaptation implementation plan commitments, developing a [memorandum](#) on how to incorporate climate change into the RCRA corrective action process, and helping two municipalities and three Tribes develop disaster debris management plans. We developed two more memos on ways to consider potential adverse climate change impacts in the hazardous waste permitting process and

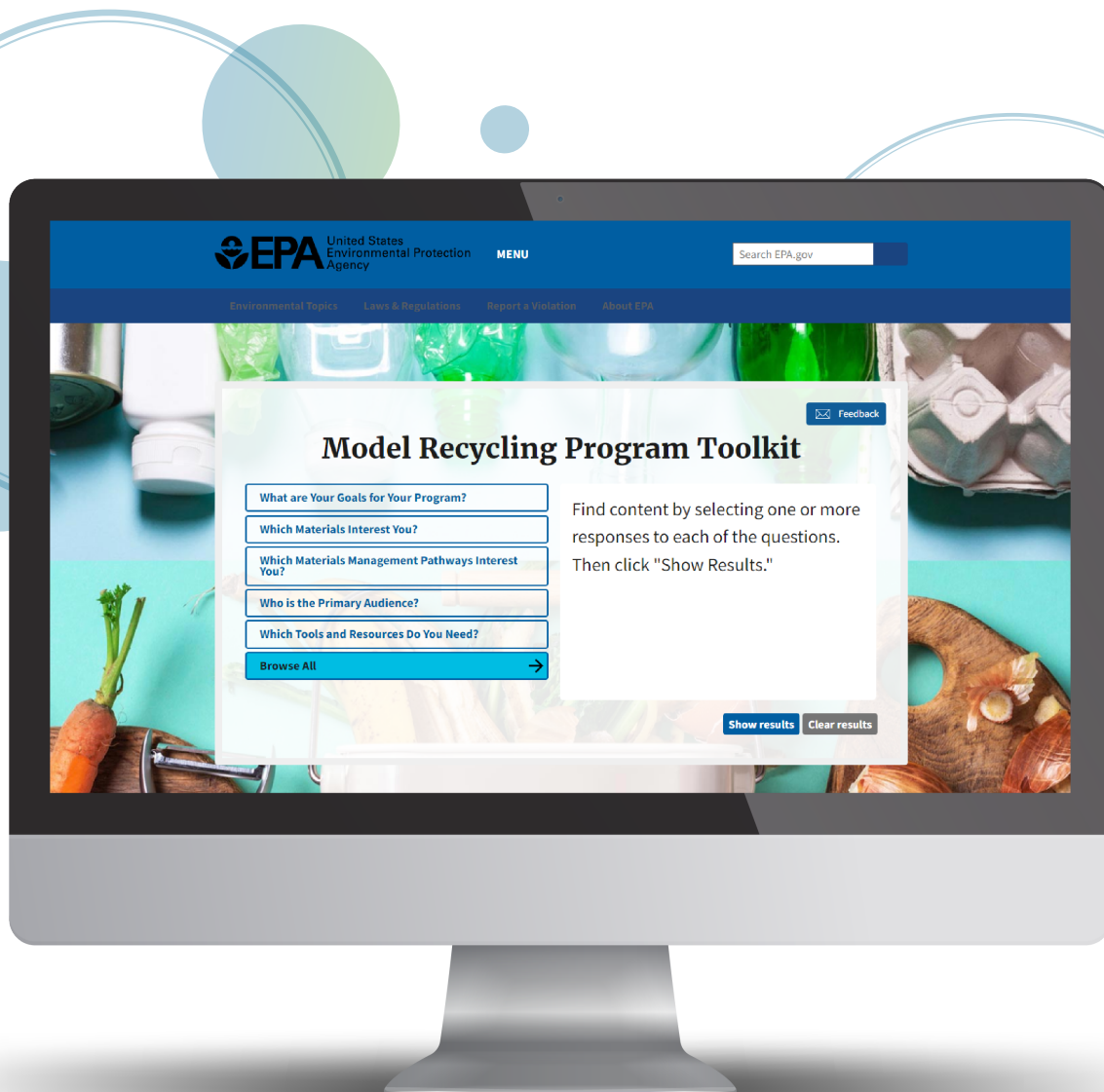
incorporate climate change resilience measures into PCB approvals. Finally, we presented 12 times to our partners on current climate work, including outreach to industry and regulators on the new [Sea Level Rise Visualization Tool](#).

All 56 States, Territories, and the District of Columbia Applied for Bipartisan Infrastructure Law Funding

On November 15, 2022, the first anniversary of the [Bipartisan Infrastructure Law](#), ORCR announced two new Requests for Applications: [the Solid Waste Infrastructure for Recycling for Communities funding opportunity \(or SWIFR for Communities\)](#), and [the Recycling Education and Outreach grant program](#). The Bipartisan Infrastructure Law established and funded these programs. On the same day, ORCR launched the [Model](#)

[Recycling Program Toolkit](#), a new searchable web application that shares EPA tools and resources on recycling, composting, reuse, and other materials management activities. With this toolkit, the public can find a range of resources, including case studies from communities that have created effective recycling, composting, reuse, and repair programs as well as training materials on how to create messages that drive behavior change.

On January 4, 2023, ORCR's Resource Conservation and Sustainability Division announced the [SWIFR funding opportunity for Tribes and Intertribal Consortia](#) to invest in the health, equity, and resilience of Tribal nations and their communities. ORCR also announced [a SWIFR funding opportunity for states and territories](#). All 56 states, territories, and the District of Columbia applied for and were awarded funding by the end of FY 2023.



Protecting Communities at Home and Abroad

Building a Circular Economy and Responsibly Recycling Batteries, Hand Sanitizer, and Safely Reusing Drum Reconditioners

Safe and efficient battery recycling is key to our work building a circular economy for the critical materials that are powering our transition away from fossil fuels. ORCR issued a [memorandum on lithium battery recycling](#) in May 2023, explaining how lithium batteries are being recycled. We also answered frequently asked questions about the safe management and regulation of hazardous waste battery recycling. We posted companion webpages and presented to industry and state audiences.

In the wake of COVID-19, many businesses realized they had excess hand sanitizer. Because safe handling of this highly flammable material is critical, we worked with regulators on guidance materials to educate businesses about the RCRA

regulations that apply to recycling and disposing of hand sanitizer. EPA encourages recycling whenever possible, provided that the recycling is legitimate. After issuing initial guidance in [February 2022](#), we developed additional guidance materials, including a [November 2022 memorandum, web updates with FAQs](#), and a [May 2023 memorandum](#).

On August 11, 2023, we published a [Used Drum Management and Reconditioning Advance Notice of Proposed Rulemaking](#) to address concerns about the management and reconditioning of used industrial containers that previously held hazardous chemicals or hazardous waste. The notice seeks comments on potential regulatory and non-regulatory approaches, such as



best management practices or revisions to our waste regulations, to better understand the issues identified and develop solutions that ensure the protection of human health and the environment.

Helping the Regulated Community Better Manage Waste

On January 12, 2023, ORCR published the [tentative denial](#) of a petition to classify discarded polyvinyl chloride, a type of plastic commonly known as PVC, as a RCRA hazardous waste. In the tentative denial, ORCR noted that concerns in the petition about plastic pollution are being addressed by other means, including existing waste management practices, and asserted EPA's discretion when it comes to prioritizing rulemakings.

On February 22, 2023, we published [guidance](#) for commercial treatment, storage, and disposal facilities hoping to temporarily stage piles of treated hazardous waste, or "put piles", before final disposal in a Subtitle C landfill. Without an approved variance, the use of put piles is considered illegal disposal, according to RCRA land disposal restriction requirements. This guidance provides information that parties must consider when submitting a petition for use of a put pile.

In FY 2023, we began managing the [Disaster Debris Recovery Tool](#), an interactive mapping tool of recyclers and landfills used by disaster

response, recovery, recycling, and planning experts to advance safe disposal of disaster debris. ORCR integrated the DDRT with the [All Hazards Waste Management Planning Tool](#) and updated the data underlying both tools. The AHWMPPT helps emergency planners create comprehensive plans for managing materials and wastes generated from disasters. This year, we also added new features to the AHWMPPT, including more waste stream estimates, the ability to share plans with other users, and training resources.

Protecting the Environment and Public Health through International Work

In FY 2023, our international work advanced equities on many fronts, including joining the U.S. Department of State-led team to negotiate a new global instrument aimed at eliminating plastic pollution through a process called the Intergovernmental Negotiating Committee. These meetings resulted in an initial draft of the treaty that will be negotiated further in FY 2024 with the aim of wrapping up at the end of 2024.

We serve as both Chair and U.S. Representative to the Working Party on Resource Productivity and Waste within the Organization for Economic Cooperation and Development, a consortium of governments of developed countries. In FY 2023, we participated in a series of high-level meetings that included the 17th and 18th Meetings of the



Working Party and the Environmental Performance Review of the U.S. on marine litter, and led negotiations on how to address the recently adopted Basel e-waste amendments in the OECD Decision of the Council on the Control of Transboundary Movements of Wastes Destined for Recovery Operations.

ORCR represented U.S. interests at several Basel Convention meetings in FY 2023, including the Basel Convention's 16th Conference of the Parties, the Open-Ended Working Group, and technical expert meetings. Along with considering proposals to change how the convention defines waste and how it classifies waste as hazardous, which would affect U.S. exports and imports, we joined efforts to further develop technical guidelines on environmentally sound management of plastic waste and other waste streams.

We also expanded [EPA's Solid Waste Management Toolkit for Decision-Makers](#) in Developing Countries and released a series of nine informational videos and four additional chapters covering topics of international interest: Addressing Plastic Waste, Solid Waste Management and Climate Change, Recycling Markets, and Equity in Solid Waste Management. We translated the materials into Spanish, French, Arabic, Vietnamese, Indonesian, and Thai to increase accessibility and further disseminate the toolkit around the world.

ORCR continues to process notices for RCRA hazardous waste imports and exports through the RCRAInfo Waste Import Export Tracking System launched in FY 2022. During FY 2023, ORCR processed 1,058 import notices from and 1,180 export notices to other countries. We launched a new application that allows exporters to file their annual reports more easily, making a previously cumbersome procedure more efficient for both the users and members of ORCR.

We also wrapped up a multi-year project facilitated by the North American Commission on Environmental Cooperation that sought to modernize electronic data exchange among the U.S., Canada, and Mexico, enabling the three countries to share information about hazardous waste imports and exports more easily.



Protecting Communities from Coal Ash

In FY 2023, we developed a CCR state and Tribal grant program. We distributed \$5.6 million in noncompetitive funding to states for the development or implementation of EPA-approved CCR programs. Twenty states received funds in FY 2023. These funds will help support states' efforts to create and manage their own CCR programs.

We also issued [a proposed denial of Alabama's CCR permit program](#). We found that the proposed Alabama permit program was less protective of people and waterways than required by federal regulations. This is the first proposed denial of a state coal ash permit program. EPA took this action to protect communities from pollution and to advance EJ.

We also issued [a proposed rule for legacy CCR surface impoundments at inactive power plants](#). The proposed rule requires that these legacy CCR surface impoundments meet most existing requirements for inactive CCR surface impoundments at active facilities. In addition, EPA proposed requirements for CCR management units at regulated CCR facilities. This proposal continues EPA's commitment to protecting communities, groundwater, waterways, drinking water, and the air from CCR contamination.

Rolling Out Whole New Grants and Initiatives to Promote a Circular Economy

All 56 States, Territories, and the District of Columbia Applied for Funding

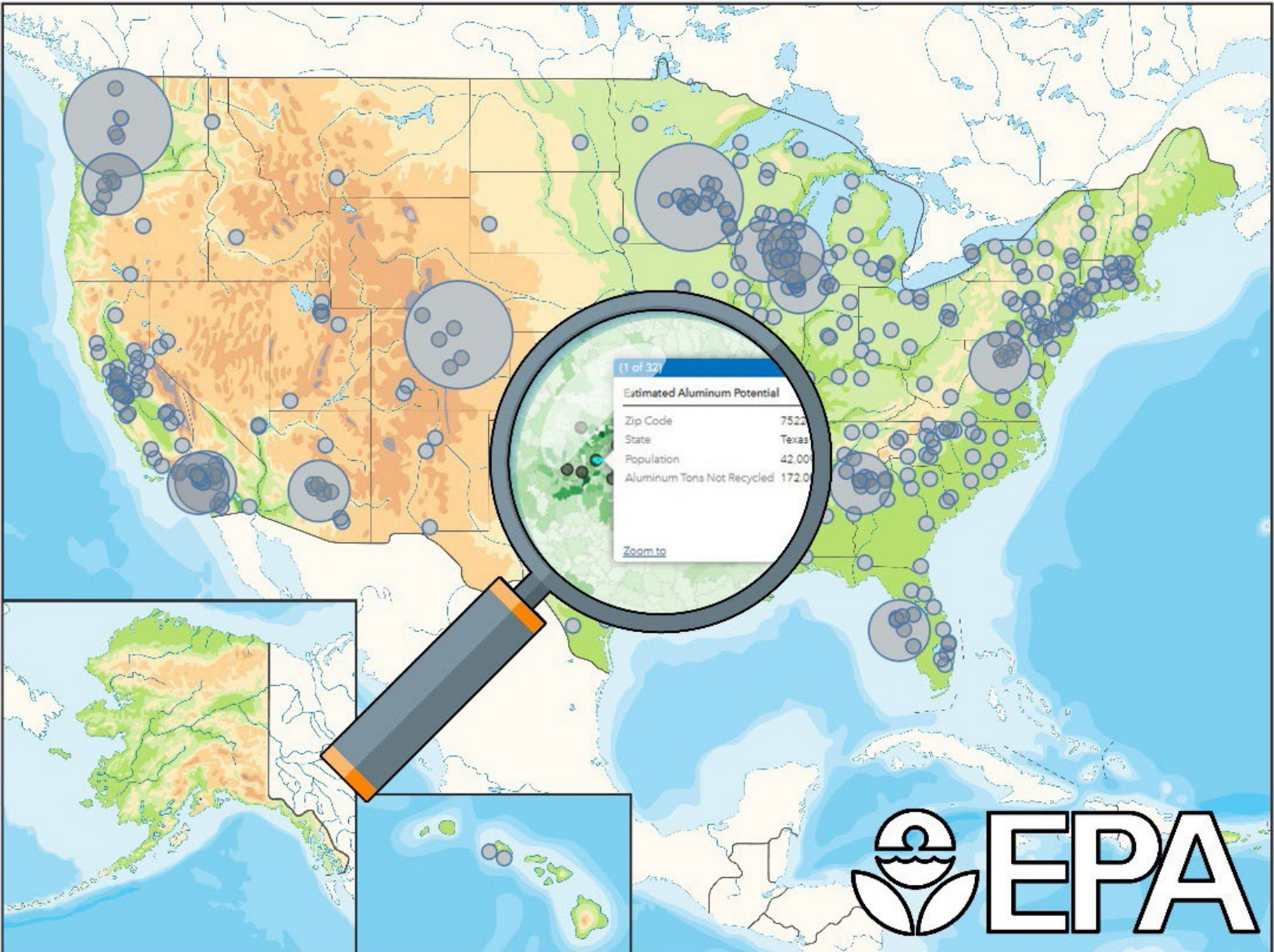
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[opportunity for states and territories](#). All 56 states, territories, and the District of Columbia applied for and were awarded funding by the end of FY 2023.

In support of the [National Recycling Strategy](#) and the Bipartisan Infrastructure Law, [ORCR developed an interactive map](#) highlighting existing infrastructure, per capita generation and recycling of post-consumer material, and other relevant market factors. The Recycling Infrastructure and Market Opportunities Map visually presents data estimates from all phases of the recycling process, including generation, collection, sortation, and end use. The map can also help develop and strengthen primary and secondary end markets for materials, support cleaner communities by reducing the amount of plastic and other waste entering landfills, and provide opportunities to address climate change by diverting more materials from landfill.





Preventing Wasted Food in Communities and Advancing Climate Goals

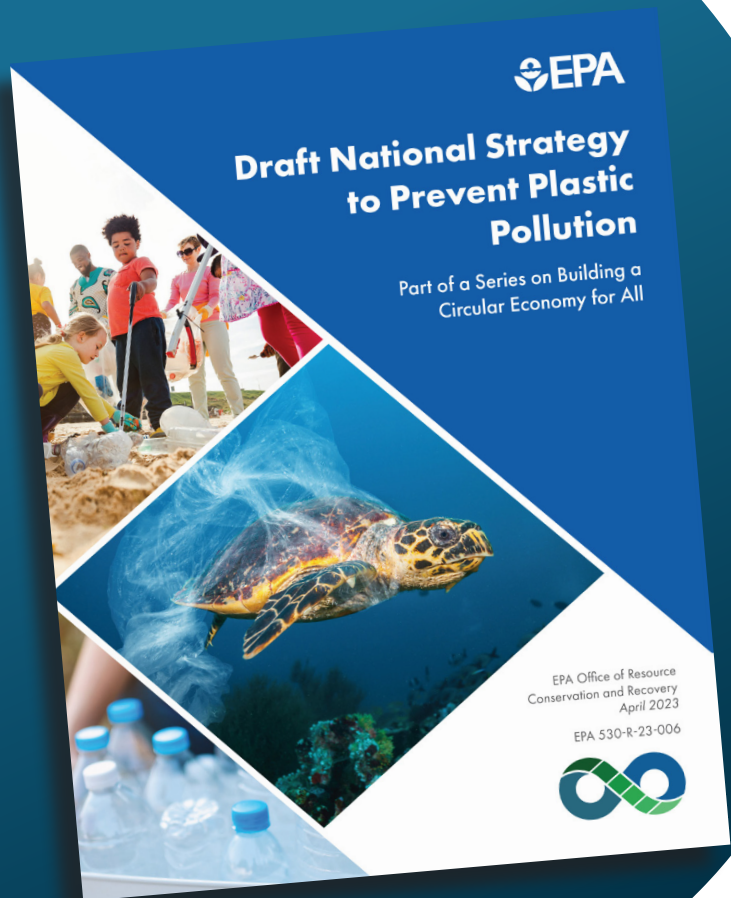
ORCR’s achievements in the area of preventing and reducing wasted food products include updated data and measurement in the [2019 Wasted Food Report](#) and the fourth [Anaerobic Digestion Facilities Processing Food Waste in the United States](#).

Another data tool included the release of Version 3.0 of the [Excess Food Opportunities Map](#), which provides data updates for all excess food generators and recipients as well as two new data layers, including farmers markets and refrigerated warehousing and storage facilities. The map also includes data layers from other mapping tools such as environmental Tribal Grant Program layers

from EPA’s EJScreen, and food insecurity and food assistance layers from the U.S. Department of Agriculture’s Food Environment Atlas.

We also released two new social marketing toolkits. We developed the toolkits to help communities move from awareness toward action by providing guidance on developing social marketing campaigns as well as customizable materials to spur behavior change. The [Preventing Wasted Food in Your Community: A Social Marketing Toolkit](#) and the [Composting Food Scraps in Your Community: A Social Marketing Toolkit](#) come with campaign materials created by municipalities and organizations that are available for any community to customize and use.





Reducing Plastic Pollution at Home and Abroad

During FY 2023, ORCR developed products and presented information to help the United States and other countries prevent plastic pollution. In April 2023, ORCR released the [Draft National Strategy to Prevent Plastic Pollution](#) for public comment, a significant step forward in the Administration's efforts to reduce pollution and build a circular economy for all. EPA's draft strategy includes ambitious actions to eliminate the release of plastic and other waste from land-based sources into the environment by 2040.

In May 2023, we funded and participated in a successful [international workshop](#) about extended producer responsibility to share insights on innovations in EPR policies, including its potential to reduce plastic pollution. ORCR and the U.S. Department of Transportation, as directed by Congress in Section 303 of the Save Our Seas 2.0 Act, sponsored the National Academy of Sciences, Engineering, and Medicine report [Recycled Plastics in Infrastructure: Current Practices, Understanding, and Opportunities](#). This report reviews the current use of recycled plastics in infrastructure applications (e.g., asphalt pavements) and evaluates the barriers and opportunities for using more recycled plastics in infrastructure. The report provides recommendations for EPA and the U.S. Department of Transportation to consider undertaking when addressing plastic waste in the United States, some of which EPA is already doing.



Prioritizing Environmental Justice and Protecting Communities from Contamination

Surpassing Goals and Incorporating Climate Change Adaptation Considerations into the Corrective Action Process

The RCRA Corrective Action Program focused on continued progress implementing the [five 2030 Corrective Action Goals](#) focused on cleaning up contamination at RCRA hazardous waste treatment storage and disposal facilities. We made significant progress toward the five-year long-term

performance goal for 425 more RCRA corrective action facilities meeting the Ready for Anticipated Use milestone by 2026, achieving 118 facilities in FY 2023, surpassing our goal of 100 facilities for the year. Nationally, the program achieved the following targets:



28 facilities met the Human Exposures Under Control target (target 18)



30 facilities met the Groundwater Migration Under Control target (target 25)



48 facilities met the Remedy Construction target (target 55)



55 facilities met the Human Exposures Under Control target (target 53)



118 facilities met the Human Exposures Under Control target (target 100)

Addressing 2030 Goal 4, we developed procedures for adjusting the Progress Track list of about 4,000 priority corrective action cleanups. We developed and piloted procedures for adding and subtracting facilities, resulting in 59 facilities added and 20 facilities subtracted from the Progress Track. We will hold an open season every February for additions. Procedures for subtractions are being finalized. The Corrective Action Program also provided program and technical support for regional and state program implementers:

- *Cleanup optimization:* completed five site-specific technical reviews to identify and address common technical barriers to cleanup progress.
- *Technical support:* supported state and regional implementors with technical presentations, peer-to-peer engagement, two virtual

courses addressing difficult cleanup issues, and leadership for a conference workshop addressing chemical vapor intrusion into buildings.

- *Policy support:* developed a policy memorandum conveying recommendations on integrating climate change adaptation considerations into the corrective action process.

Ramping Up OB/OD, PCB Cleanup and Disposal, and EJ/Climate Efforts

In FY 2023, we continued efforts to respond to concerns about potential impacts related to OB/OD of waste explosives. Specifically, in FY 2023,



we submitted a draft proposed rule for interagency review to the Office of Management and Budget that would improve implementation of the existing requirements to evaluate and implement safe and available alternatives in lieu of OB/OD. We also assisted in implementation of the existing requirements, which included providing contractor assistance and developing tools to assist permitting authorities in reviewing alternative technology evaluations and providing site-specific assistance to several EPA Regions, states, and territories.

In August 2023, we published a final rule in the Federal Register that addresses several key issues related to implementing the PCB Cleanup and Disposal Program under the Toxic Substances Control Act. Specifically, EPA expanded available options for extraction and determinative methods used to characterize and verify the cleanup of PCB waste, added more flexible provisions to facilitate the cleanup of spills that occur during emergency situations (e.g., hurricanes or floods), and strengthened the performance-based disposal option for PCB remediation waste by adding explicit cleanup provisions, such as the requirements to notify EPA and follow specific sampling protocols.

Partnering with States and Facilitating Engagement

ORCR oversees the authorization of hazardous waste management programs to states in lieu of EPA and provides support for the distribution of hazardous waste grant funds to states. In FY 2023, we provided staff support to EPA Region 10 to assist with the Alaska authorization process. We also continued to support EPA Regions and states as they worked toward meeting internal FY 2025 regional performance goals for the Percentage of Recent Core Program RCRA Rules Authorized measure. The measure is designed to focus state and regional efforts on recent rules that are critical for core RCRA program implementation and more clearly demonstrate progress when states are newly authorized. We provided authorization datasets, guidance, and rule checklists as well as technical assistance to EPA Regions and states to enable further authorization progress.

We also support EPA-state interaction and participation of state partners in the development of hazardous and solid waste management policies, programs, and initiatives, by administering the RCRA State Implementation Support Grant, which was awarded to ASTSWMO. We continued to strengthen our working relationship and opportunities for engagement with states through effective management of the cooperative agreement with ASTSWMO. In FY 2023,

staff continued to oversee the new cooperative agreement that is in place for FYs 2023 to 2027. In FY 2023, this agreement enabled ASTSWMO to return to holding in-person meetings with EPA support and participation.

Collaborating with Tribes and Federal Agencies on Training and Assistance Efforts

ORCR is committed to establishing partnerships and fostering relationships with Tribes and federal agencies. One initiative involves collaborating with the Federal Agency Training Work Group to ensure that Tribes have access to comprehensive Tribal waste management training. In spring 2023, in collaboration with our federal agency partners, we launched the [Training Resources for Tribal Waste Management website](#) to offer Tribes valuable training materials. ORCR led this effort in collaboration with representatives from the Bureau of Indian Affairs, the Federal Emergency Management Agency, the U.S. Department of Housing and Urban Development, the Indian Health Service and USDA.

Another successful collaboration for the Tribal Program Team in 2023 involved working closely with Tribes and the Indian Health Service on addressing open dumping on Tribal lands. In June 2023, IHS and EPA joined the Navajo Nation to validate the large-scale open dumps on Navajo land. The multi-agency teams set out to identify the locations and verify the contents of 36 sites in the eastern and central areas of the Navajo Nation and located several additional open dumps, for a total of 55 verified sites. In addition, in September 2023, EPA and his validated 59 open dumps at the Crow Creek Sioux Tribe, the Rosebud Sioux Tribe, and the Oglala Sioux Tribe in the IHS Great Plains Area/ EPA Region 8. We also tested a revised version of the IHS mobile app and a shorter, simpler training program that will eventually be housed online for all Tribes to access. Validating the locations and contents of open dumps is the first step required to pursue cleanup funds from IHS and assistance from other programs such as the General Assistance Program and the Brownfields program.

We also led a Tribal Solid Waste Operations and Maintenance Work Group charged with



defining a path to address the lack of available funding for Tribes to implement sustainable waste management programs for residential waste. There is not a consistent federal source of funding available to assist Tribes, and most Tribes are under-resourced due to lack of a sufficient tax base to collect fees. The work group will work with a contractor on a study to document the order of magnitude of the need and to develop a strategy to potentially seek an appropriation.

The work group includes ORCR staff and management, EPA Region 9, and the American Indian Environmental Office. The work group kicked off soliciting Tribal input in July 2023 with ORCR Director Carolyn Hoskinson hosting the interactive webinar [Let's Talk About it: Waste Management Nuts and Bolts](#). The webinar emphasized the importance of operation and maintenance activities and how ORCR is working with the Infrastructure Task Force to explore options for Tribes to stabilize O&M funding. Since the webinar, the work group has had input sessions with nine Regional Tribal Operations Committees, the National Tribal Caucus and the Michigan Tribal Environmental Group, and the United South and Eastern Tribes in preparation for conducting the study. The work group will obtain additional input from the remaining RTOCs and other Tribal environmental groups during FY 2024.

Improving Data Exchange through RCRAInfo Updates

In FY 2023, we successfully launched WIETS Annual Reports functionality in RCRAInfo and facilitated Canada joining the North American data exchange. We successfully completed data collection for the 2021 Biennial Report and made the data available for internal and external use. We hosted the RCRAInfo National Users Conference offering 70 sessions across four days for more than 160 state, regional, and EPA Headquarters personnel. We also developed and deployed module dashboards across RCRAInfo, creating first-time manager-level snapshots of the data for each state and region by module.

Launching the e-Manifest Remote Signer Policy to Enable Greater Adoption of the System

Increasing the adoption of e-Manifest is important because it facilitates the electronic transmission of the uniform manifest form, which accompanies shipments of hazardous waste. In May 2023, [ORCR issued a policy](#) to allow personnel to execute electronic signatures through their employees or contractors who are remotely located from the hazardous waste shipment. This Remote Signer

Navajo Nation, Indian Health Service and EPA gather for a group photo after assessing open dumps in the field.



policy resolves a longstanding barrier to electronic adoption by providing a way for unregistered individuals to sign electronic manifests through registered coworkers with e-Manifest access. ORCR spearheaded the development, communication, and implementation of this policy to the user community as well as developed new IT system functionality to support the practical execution of this policy.

Continuing to Increase the Use of e-Manifest through the Advisory Board

In FY 2023, we held two public advisory board meetings for our user community. In October 2022, we presented [Roadmap to 100% Electronic Manifests](#), which outlined proposed strategies to increase the use of electronic manifests. Of note, we presented the Remote Signer policy as a proposal and the Advisory Board supported it. In March 2023, we held a meeting titled [Meeting the Needs of the User Community: e-Manifest Program Priorities and User Fees for Fiscal Year \(FY\) 2024 and 2025](#), which presented proposed fees and program priorities for the upcoming two-year period.



EPA information technology specialist Lori Furr speaking at the 2023 RCRAInfo National Users Conference.



Dr. Fred Jenkins from EPA's Office of Science Coordination & Policy speaking at the October 2022 e-Manifest Advisory Board meeting.

Supporting ORCR: Management, Communications and Analysis Support

Several parts of the organization support ORCR’s mission through service-related functions such as hiring, budget, contracts, economics, and communications support.

Supporting the Office with Appropriate Resources

ORCR’s resources management staff is responsible for administrative areas including budget-related functions, human resource management, facilities, and employee-related information technology management.

- In FY 2023, ORCR hired and onboarded 11 new staff persons, started four more hiring actions, and processed 15 people who were retiring or leaving. We processed several internal promotions as well. An additional 15 external employees came onboard for temporary details within ORCR; nine employees took advantage of details outside of ORCR.
- ORCR human resources staff participated in three recruiting events.
- In FY 2023, ORCR staff received a total of 14 Agency-wide awards, 53 OLEM awards, and 114 ORCR awards.
- We also began modernizing our technology, including installing monitors in conference rooms and using Bluetooth speakers while awaiting the Agency’s conference room equipment installation.
- ORCR processed over 100 funding actions, committing over 85% of our extramural resources.



28

new staff persons
hired



3

recruiting events
attended



181

awards received
by ORCR staff



100+

funding actions
processed

Providing Risk Analysis and Economics Support to the Office

The principal responsibilities of ORCR’s economics and risk analysis staff are to provide risk analysis and economics support for waste and materials management work.

In FY 2023, ERAS provided economic support for the development of 10 rules and other projects. These efforts included novel evaluations of the economic benefits associated with reduced adverse health impacts. For two rulemakings regarding per- and polyfluoroalkyl substances, we conducted spatial analyses to evaluate the number of people drinking domestic well water near potentially contaminated PFAS sites. This was combined with potential reductions in PFAS groundwater concentrations along with monetized benefits from reductions in cardiovascular disease, reduced birth weight, and cancer to describe economic benefits in reducing these health effects from remediating environmental PFAS. In support of the development of new guidance for residential lead cleanup, we also evaluated the benefits resulting from the reduction of cognitive delays and other health effects. The inclusion of the economic benefits from reductions in cardiovascular disease

was a novel addition to the economic analysis of reducing lead exposure.

In 2023, ERAS also provided risk analysis support for multiple coal combustion residual regulatory actions, beneficial use petitions, novel leaching test methods, and groundwater modeling. The risk team supported several cross-agency actions, including the update to EPA's revised draft guidance on the destruction and disposal of PFAS. In March, the risk team completed a [comprehensive analysis](#) of the use of a particular type of CCR (flue gas desulfurization gypsum) in agriculture. This analysis found that, under most circumstances, FGD gypsum can be used safely for agricultural purposes, offering benefits to farms, and reducing the amount of material that would need to be landfilled or otherwise disposed of.

Improving the Accessibility of Our Important Work to Protect the Environment and Public Health

ORCR's communications services staff supports our mission through a variety of communications products. We focus on improving plain language to make our work as accessible as possible to as many people as possible. CSS cultivates 25 web areas containing about 2,000 webpages that help the

public understand our work.

In the last fiscal year, ORCR webpages were viewed 7.76 million times. The top three most-visited pages were the [Reduce, Reuse, Recycle web area](#), specifically [Recycling Basics](#) and [Composting at Home](#), followed by the [Facts and Figures National Overview](#) webpage.

In FY 2023, CSS published seven press releases, drafted many communications plans, desk statements, video scripts, articles, social media posts, Presidential Proclamations, talking points, and slide decks, and edited several products. CSS communicated the impressive work of our office through two monthly electronic newsletters: the rebranded "In the Loop with EPA: Circular Economy Updates" newsletter, which has more than 22,000 subscribers, and the rebranded "EPA Waste Management Updates" newsletter, which has more than 5,700 subscribers.

We responded to 168 inquiries from news media in FY 2023. Each inquiry involved about a dozen people, many with detailed follow-ups, and coordination across the Agency. We also led several experts through media training in preparation for interviews with the press. We continue to showcase the vast breadth and depth of work accomplished by ORCR to ensure the public understands everything we do to protect human health and the environment.





Office of Resource Conservation and Recovery
Office of Land and Emergency Management
EPA-530-R-24-002

www.epa.gov/aboutepa/about-office-land-and-emergency-management