



AMERICAN RECOVERY AND REINVESTMENT ACT FINDINGS FOR CONSIDERATION IN THE IMPLEMENTATION OF THE INFRASTRUCTURE INVESTMENT AND JOBS ACT



Images from Office of Inspector General reports on American Recovery and Reinvestment Act funds. (EPA OIG images)

Purpose:

We performed this review to identify findings from prior U.S. Environmental Protection Agency Office of Inspector General reports related to the EPA's management of its American Recovery and Reinvestment Act funds and to develop lessons that may inform the EPA's management of programs funded by the Infrastructure Investment and Jobs Act of 2021. The project number for this review was [OA-FY22-0142](#).

This review supports the following EPA mission-related efforts:

- *Compliance with the law.*
- *Partnering with states and other stakeholders.*
- *Operating efficiently and effectively.*

This review addresses top EPA management challenges:

- *Managing business operations and resources.*
- *Managing increased investment in infrastructure.*

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Full list of [EPA OIG reports](#).

Overview

In 2021, the Infrastructure Investment and Jobs Act, or IIJA, provided funding for many EPA programs. Many of the same programs received funds in 2009 under the American Recovery and Reinvestment Act, or ARRA. The U.S. Environmental Protection Agency Office of Inspector General issued various reports on EPA programs that received funds under the ARRA. The OIG [initiated](#) this review to identify findings from those reports and develop lessons that may help the Agency prepare, implement, and oversee programs receiving IIJA appropriations. We present three lessons and examples of the findings in this report.

This project is not an audit or evaluation but a review of prior OIG reports and a summary of our findings. Appendix A lists the 28 reports that we reviewed.

Background

The Office of Management and Budget, or OMB, Memorandum M-22-12, *Advancing Effective Stewardship of Taxpayer Resources and Outcomes in the Implementation of the Infrastructure Investment and Jobs Act*, dated April 29, 2022, requires federal agencies to implement IIJA-funded programs efficiently and effectively by developing program implementation plans that, among other things, have financial management controls and risk mitigation strategies at the program level. The OMB memorandum reaffirmed the importance of early collaboration between agencies and their inspectors general. This collaboration helps create programs that balance efficiency, equitable access, and integrity and minimize fraud waste and abuse.

ARRA Funding of EPA Programs

The ARRA was signed into law on February 17, 2009. It authorized \$787 billion in funding in the form of tax cuts, contracts, grants, and loans, among other things.

The Act aimed to:

1. “[P]reserve and create jobs and promote economic recovery.”
2. “[A]ssist those most impacted by the recession.”

3. “[P]rovide investments needed to increase economic efficiency by spurring technological advances in science and health.”
4. “[I]nvest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits.”
5. “[S]tabilize state and local government budgets in order to minimize and avoid reductions in essential services and counterproductive state and local tax increases.”

Of the \$787 billion in ARRA funds, the EPA received \$7.2 billion to award or disburse. ARRA funding for EPA programs was designed to protect and increase green jobs; sustain communities; restore and preserve the economic viability of property; promote scientific advances and technological innovation; and ensure a safer, healthier environment.

ARRA Buy American Mandate

Section 1605 of the ARRA, commonly known as the Buy American provision, requires the use of American iron, steel, and manufactured goods for the construction, alteration, maintenance, or repair of a public building or public work.

IIJA Funding of EPA Programs

On November 15, 2021, President Joseph R. Biden signed the IIJA, Pub. L. 117-58, into law. Overall, the IIJA authorizes \$1.2 trillion to be allocated to states and other entities. Approximately \$60 billion of this funding was appropriated to the EPA for fiscal years 2022 through 2026.

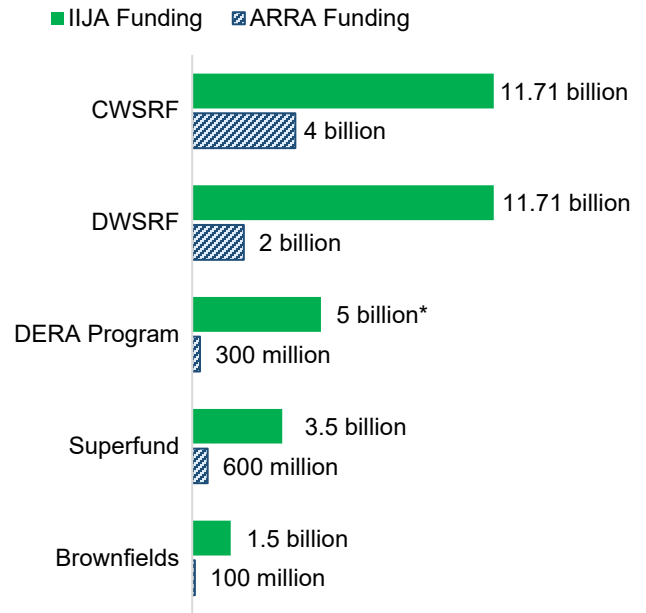
The IIJA requires the EPA to make significant investments to advance public health and safety by improving the nation’s drinking water, wastewater, and stormwater infrastructure; cleaning up legacy pollution; investing in healthier air; increasing the Agency’s workforce; and enhancing the country’s climate resilience. About 83 percent of the funding is allocated for water infrastructure projects; 9 percent is for cleanup, revitalization, and recycling efforts; 8 percent is for school buses with reduced diesel emissions; and less than 1 percent is for pollution prevention.

The IIJA appropriation is a significant increase in funding for the EPA, which has received annual appropriations ranging from approximately \$8 billion to \$9.4 billion over the past ten years. The IIJA also provides over eight times the amount of funds received from the ARRA. Figure 1 compares IIJA and ARRA funding for selected programs, like the Clean Water State Revolving Fund, or CWSRF; Drinking Water State Revolving Fund, or DWSRF; and the Diesel Emissions Reductions Act, or DERA, programs. The IIJA provided funding for many programs that also received funding under the ARRA. The Acts have similar requirements, although the IIJA provides for the expansion of both Buy American and Davis-Bacon Act requirements.

IIJA Build America, Buy America Act

Section 70914 of the IIJA requires incorporation of a Buy American preference in the terms and conditions of each infrastructure project award. The Act requires that all iron, steel, and manufactured products used in the project are produced in the United States.

Figure 1: Funding comparison for selected programs



Note: This figure does not represent all IIJA funding. The EPA's [website](#) details the funding allocations for all EPA programs receiving IIJA funding.

Source: OIG analysis of EPA data. (EPA OIG image)

* While DERA did not receive additional funding through IIJA, emissions reductions are being funded by IIJA through the Clean School Bus Program.

Scope and Methodology

We identified and analyzed 28 OIG reports related to the EPA's management of ARRA funds. From our analysis, we categorized the findings in these reports into key lessons. Appendix B details our scope and methodology, and Appendix C shows which lessons appear in each report.

Responsible Offices

While the Office of the Administrator is primarily responsible for oversight of the EPA's IIJA funding, the reports reviewed were issued to various action officials. The Office of Water, Office of Land and Emergency Management, Office of Mission Support, Office of Air and Radiation, and regional administrators may benefit from the lessons described in this report.

What We Found

Through our analysis of 28 ARRA reports, we developed three lessons that the EPA should consider to mitigate risks and reduce the likelihood of fraud, waste, and abuse of IIJA funds:

- Ensure that federal requirements are met.
- Provide clear and comprehensive guidance.
- Improve project management, monitoring, and data verification.

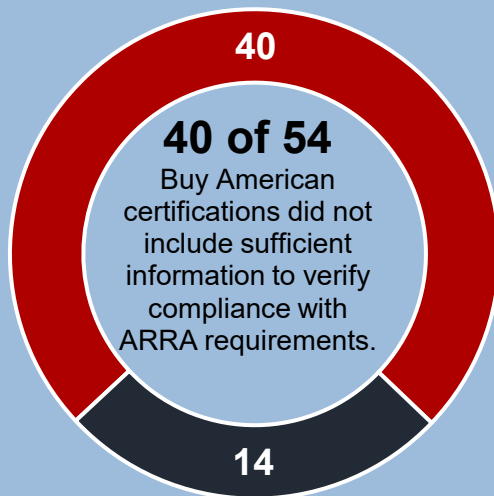


Source: EPA OIG image.

Davis-Bacon Act Mandate

Section 1606 of the ARRA, known as the Davis-Bacon Act mandate, required that laborers and mechanics employed by contractors or subcontractors be paid no less than the local prevailing wages and fringe benefits for similar projects. The IIJA includes an expansion of Davis-Bacon Act requirements.

**Figure 2:
Buy American compliance**



Source: OIG analysis of EPA data.
(EPA OIG image)

In the following sections, we describe these lessons and provide examples of the findings the OIG identified in relation to the EPA's administration of ARRA funds. The EPA should consider these lessons and aim to avoid similar challenges as it fulfills its responsibilities under the IIJA.

Ensure that Federal Requirements Are Met

Ten prior reports identified areas related to noncompliance with various federal requirements. Specifically, five reports found issues with noncompliance with ARRA Buy American requirements, three reports identified noncompliance with the Davis-Bacon Act requirements, and five reports highlighted noncompliance with other federal requirements.¹ For example, we found that:

- Forty of 54 Buy American certifications for five CWSRF projects did not include sufficient information to verify compliance with ARRA requirements, as shown in Figure 2. In one instance, the subrecipient accepted the supplier's statement that materials made in Canada automatically complied with the ARRA, when in fact they were not allowable purchases under the Buy American provision. In other instances, the documentation that the subrecipient accepted from suppliers was missing key information related to the Buy American provision.
- The EPA's oversight did not ensure that ARRA requirements were met on CWSRF projects. The inspection checklist used to confirm that projects comply with the Davis-Bacon Act and Buy American provisions of ARRA did not include sufficiently detailed questions to facilitate EPA oversight of state programs. For example, it did not include detailed questions on the Buy American and Davis-Bacon Act provisions, testing when erroneous payments were identified, or state oversight of project construction. Revising the EPA's review checklist would strengthen EPA's oversight process and increase EPA's ability to identify noncompliance.
- A Superfund site audit found that a contractor did not have adequate controls to ensure that its subcontractors and vendors complied with the Buy American and Davis-Bacon Act mandates of the ARRA.
- The Buy American certifications were not maintained, and the Davis-Bacon Act requirements were not verified, because the subrecipient, a local government, did not communicate the ARRA requirements to the construction contractor.
- For the DERA program:
 - Five of the six recipients did not have financial management systems that met federal requirements.
 - Four of the six recipients did not meet ARRA job reporting and Buy American requirements.

¹ Reports listed do not always add up to the number of reports identified under each category, as some reports may have multiple findings across different categories.

- Four of the six recipients did not meet all objectives of grant awards. These recipients did not demonstrate that projects achieved the desired emissions reductions.

The noncompliance findings resulted in questioned costs in three programs: CWSRF, DERA, and Superfund. For example, because of the DERA review, the OIG questioned \$23.8 million of \$26.3 million in DERA expenditures. The Superfund site audit resulted in a notification to the OIG Office of Investigations, which referred the noncompliance to the U.S. Department of Justice. Later, the Department of Justice entered into a settlement agreement with a subcontractor in the amount of \$120,216.

The substantial increase in funding that the IIJA provides these programs presents a significant challenge to ensure federal requirements are met. Without proper oversight, projects are at increased risk of fraud, waste, and abuse. Additionally, they may not comply with IIJA requirements or achieve IIJA goals.

Provide Clear and Comprehensive Guidance

In nine reports, the OIG identified challenges related to the EPA's guidance. For example, we found that:

- Overall, there was an absence of actionable EPA guidance or an overarching strategy on how to achieve ARRA goals and Agency priorities beyond environmental protection.
- Fifty-five percent of the EPA's regional ARRA program staff survey respondents rated "timeliness and adequacy of external guidance" as an "impediment" or "significant impediment" to effective implementation of ARRA funds, referring to guidance provided from OMB or the U.S. Department of Labor.
- EPA grant conditions stipulated that grantees must use funds for early replacements, not to replace vehicles or engines that would have been replaced due to normal attrition. However, neither the grant conditions nor EPA guidance explained normal attrition for vehicle replacements. Vehicles or engines that would have been replaced due to normal attrition were not eligible for DERA funding. Two subgrantees replaced three vehicles even though they planned to replace them due to normal attrition.
- OMB guidance requires federal agencies to provide Recovery Act recipients with a list of key award information. EPA prepared a reference guide that instructed recipients where to find this information. However, the EPA guidance was unclear, which left recipients to interpret how to report information. This resulted in some reporting of inaccurate data. Instances were reported for all EPA programs listed in Figure 1.

In three of the nine reports, we identified specific challenges that states encountered in implementing programs with ARRA funds because of deficiencies in guidance. For example, we found that:

- The EPA did not develop and issue clear and comprehensive

guidance in time to meet many of the states' needs for CWSRF and DWSRF green reserve projects.²

- States faced challenges with understanding and implementing new ARRA requirements for DWSRF projects.
- The EPA's ARRA risk mitigation plan did not specify the actions that the Agency would take to identify states at risk of not meeting contract or construction deadlines, and the DWSRF program did not rely on the plan's framework.
- The EPA did not clarify which sites would be eligible for ARRA Leaking Underground Storage Tank funds.

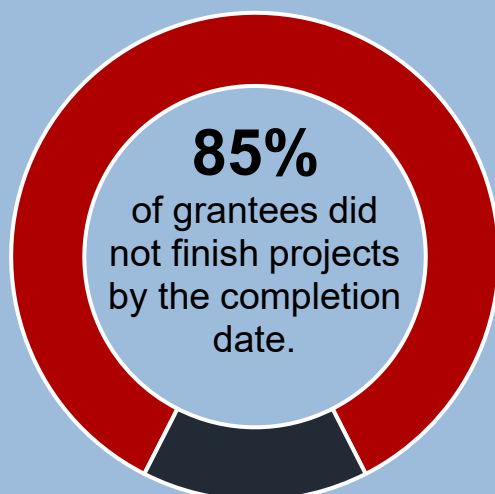
These deficiencies resulted in various effects. For example, one report highlighted three vehicles replaced under DERA for a total of \$108,425, but the report concluded that those expenditures did not meet the intent of DERA. The changes in EPA's guidance for determining project eligibility resulted in EPA regions applying different standards for approving states' project proposals. Without timely, clear, and comprehensive guidance, the EPA regions and states could not adequately determine the extent to which projects met requirements, goals, and objectives. The EPA should ensure that its guidance is clear so that IIJA goals and objectives can be met and accurately reported.

Improve Project Management, Monitoring, and Data Verification

In 15 reports, we identified that the EPA experienced challenges with project management, monitoring, and data verification when implementing projects funded by the ARRA. In five reports, we found issues with how programs were managed. Findings from these reports include resource planning issues, project delays, challenges in conducting contractor evaluations, and failure to use tools like financial monitoring reviews and the grants management system. For example, we found that:

- The EPA did not ensure that it had sufficient contracts and grants staff to perform ARRA and non-ARRA activities.
- Eighty-five percent of the DERA grantees did not finish projects by the completion date, as shown in Figure 3. The EPA granted no-cost time extensions for those grantees; however, the EPA did not include the new time frames in the awards for three of the 15 grants.
- The EPA did not complete 83 percent of the required contractor performance evaluations in a timely manner for contractors awarded ARRA funds for environmental cleanup.
- The EPA had no plan to deobligate unspent ARRA funds from Leaking Underground Storage Tank grant recipients. Failure to meet obligation and expenditure requirements could cause states to lose part of their ARRA awards.

**Figure 3:
DERA grant projects**



Source: OIG analysis of EPA data.
(EPA OIG image)

² The ARRA required that states reserve at least 20 percent of the funding for green projects designed to further environmental objectives.

Justice40 at EPA

In January 2021, President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, announced [Justice40](#), which mandates that at least 40 percent of the benefits of certain federal programs must flow to disadvantaged communities.

- The EPA did not clearly describe its responsibilities in the terms and conditions of the Superfund and DWSRF ARRA-funded interagency agreements for project management services. As stated in federal guidance and EPA's internal policies, these agreements should identify both the requesting and servicing agencies' responsibilities.

In seven reports, we found that the EPA was unable to assess the impact of ARRA-funded work. In some instances, we also found issues with the EPA's data verification. For example, we found that:

- The EPA was unable to assess the overall impact of ARRA funds on economically disadvantaged communities or communities most impacted by the recession. The effort was hindered by the absence of definitions, data, and measures.
- Documentation of grant activities did not always demonstrate that funded DERA work achieved the desired emissions reductions.
- The Office of Acquisition Management did not develop agencywide performance measures, thereby making it difficult to quickly address emerging issues such as impacts from ARRA work.

Five reports specifically identified challenges in monitoring. For example, we found that:

- Program staff were not always aware of the results of the financial monitoring reviews,³ nor did staff use the reviews as project management tools for overseeing contracts on Superfund projects.
- States had inconsistent approaches to CWSRF construction project oversight. Some states conducted inspections based on a percentage of project completion, while others had biweekly, monthly, or quarterly inspections. States that conducted more frequent project inspections identified more issues related to noncompliance with ARRA requirements.
- The EPA DWSRF management did not monitor projects at the national level because it believed that regional-level monitoring was appropriate.

These challenges resulted in various effects. For example, because of insufficient contracts and grants staff, non-ARRA resources were devoted to supporting ARRA activities, leaving fewer resources for non-ARRA administration, monitoring, and oversight. As a result, the EPA did not have the information it needed to effectively and efficiently manage its workforce and workload and to quickly address emerging issues. In addition, the EPA did not consider contractor performance prior to awarding funds for Superfund projects and awarded \$109 million to contractors with performance issues. Contractor performance could have been considered if EPA had used the financial monitoring reviews. Lastly, because the EPA did not clearly define its

³ Financial monitoring reviews are integral parts of the overall contract management review process. Their primary objective is to assure that contractor invoices are adequately supported by their cost accounting system and supporting documents and can therefore be considered a financially sound basis for payment, in accordance with the terms and conditions of the contract.

role in implementing ARRA interagency agreements, it did not effectively establish its accountability for implementing the agreements. When EPA's role is not clearly defined the Agency may incur higher costs and possible delays due to duplication of effort or misunderstanding of various agencies' roles. The EPA should consider these prior findings to help establish effective project management, monitoring, and data verification for projects funded by the IJA.

Conclusions

Many of the same programs that received ARRA funds, which were the subject of findings in our previous oversight work, will receive substantially more funding under the IJA. The Agency should consider the lessons we presented in this report to mitigate risks and reduce the likelihood of fraud, waste, and abuse of IJA funds. The Agency should ensure requirements are met; clear and comprehensive guidance is provided; and adequate project management, monitoring, and data verification are implemented. Consideration of the lessons developed from prior oversight of EPA programs that received ARRA funds may help the Agency successfully prepare, implement, and oversee programs receiving IJA appropriations.

Reports Reviewed

Report number	Report title	Date published
11-R-0519	EPA and States Should Strengthen Oversight of Clean Water State Revolving Fund Recovery Act Projects	8/24/11
14-R-0355	Audits on EPA Recovery Act Funded Diesel Emission Reduction Act Assistance Agreements Reported Programmatic and Management Challenges	9/15/14
10-R-0057	EPA Needs Definitive Guidance for Recovery Act and Future Green Reserve Projects	2/1/10
11-R-0208	EPA Faced Multiple Constraints to Targeting Recovery Act Funds	4/11/11
12-R-0377	American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant, Village of Itasca, Illinois	3/30/12
09-X-0217	EPA Should Revise its Grant Accrual Methodology to Address Impact of Recovery Act Funds	8/19/09
10-R-0049	EPA Action Needed to Ensure Drinking Water State Revolving Fund Projects Meet the American Recovery and Reinvestment Act Deadline of February 17, 2010	12/17/09
11-R-0018	Leaking Underground Storage Tank Recovery Act Grants Contained Requirements but Priority Lists Need More Oversight	11/22/10
11-R-0081	EPA Can Improve the Use of Financial Monitoring Reviews for Recovery Act Superfund Contracts	1/31/11
12-R-0601	American Recovery and Reinvestment Act Site Visit of the Diversion Ditch Repair Project at the Gilt Edge Mine Superfund Site, Lawrence County, South Dakota	7/25/12
10-R-0151	EPA Submitted Accurate and Timely Recovery Act Financial Reports	6/22/10
10-R-0234	EPA Effectively Reviewed Recovery Act Recipient Data but Opportunities for Improvement Exist	9/27/10
12-R-0898	EPA Can Improve Its Reporting of Dollars Leveraged from the American Recovery and Reinvestment Act Brownfields Program	9/27/12
13-R-0206	Audit of American Recovery and Reinvestment Act-Funded Cooperative Agreement 2S-96099601 Awarded to the Idaho Department of Environmental Quality	3/28/13
11-R-0141	EPA Should Improve Guidance and Oversight to Ensure Effective Recovery Act-Funded Diesel Emissions Reduction Act Activities	3/1/11
11-R-0016	EPA's Terms and Conditions as Well as Process to Award Recovery Act Interagency Agreements Need Improvement	11/16/10
11-R-0005	EPA's Contracts and Grants Workforce May Face Future Workload Issues	10/25/10
10-R-0082	EPA Maximized Competition for Recovery Act Grants under the National Clean Diesel Funding Assistance Program	3/23/10
11-R-0179	EPA Needs to Better Document Project Delays for Recovery Act Diesel Emission Reduction Act Grants	3/28/11
10-R-0147	American Recovery and Reinvestment Act Site Inspection of the High-Rate Water Treatment Facility, City of Newark, Ohio	6/16/10
11-R-0014	American Recovery and Reinvestment Act Site Inspection of Sewer Pump Station Rehabilitation and Improvements, Town of Ball, Louisiana	11/9/10
11-R-0082	American Recovery and Reinvestment Act Site Inspection of the Clean Water State Revolving Fund Projects at the City of Long Beach, California	2/1/11
11-R-0172	American Recovery and Reinvestment Act Site Visit of the Denver Street Storage Project, City of Astoria, Oregon	3/22/11
11-R-0193	American Recovery and Reinvestment Act Site Visit of Water System Improvement Project, Waleska, Georgia	3/29/11

Report number	Report title	Date published
11-R-0192	American Recovery and Reinvestment Act Site Visit of the Comprehensive Sewer System Rehabilitation, Subsystem PS-5, Saugus, Massachusetts	3/29/11
11-R-0083	American Recovery and Reinvestment Act Site Inspection of Sewer System Improvement Projects, City of Parma, Ohio	2/2/11
10-R-0113	EPA Should Improve Its Contractor Performance Evaluation Process for Contractors Receiving Recovery Act Funds	4/26/10
11-R-0700	American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant-Phase II Improvements Project, City of Ottawa, Illinois	9/23/11

Source: OIG analysis of EPA reports. (EPA OIG table)

Scope and Methodology

We conducted this project from July to December 2022. We did not follow generally accepted government auditing standards or the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation*. However, we did follow the OIG's quality control procedures for ensuring that the information in this report is accurate and supported. Additionally, the *Quality Standards for Federal Offices of Inspector General* require that our work adheres to the highest ethical principles of integrity, objectivity, confidentiality, independence, and professional judgement, and we adhered to these principles in performing our work.

We identified and analyzed 28 EPA OIG reports related to the EPA's management of ARRA funds. Appendix A contains a list of these reports. Specifically, we looked at report information, such as the date of publication and the applicable program; report themes and significant findings; and unimplemented recommendations. From our analysis, we categorized the findings into key lessons. Appendix C shows which lessons appear in each report.

Summary of Lessons Developed from Prior Oversight

From our analysis of 28 OIG reports, we categorized the findings in each report into three key lessons. The table below shows which lessons appear in each report.

EPA OIG report number	Lessons identified		
	The EPA needs to ensure that federal requirements are met	The EPA needs to provide clear and comprehensive guidance	The EPA needs to improve project management, monitoring, and data verification
11-R-0519	X	X	X
14-R-0355	X		X
10-R-0057		X	X
11-R-0208		X	X
12-R-0377	X		
09-X-0217			X
10-R-0049		X	X
11-R-0018	X	X	X
11-R-0081		X	X
12-R-0601	X		
10-R-0234		X	X
12-R-0898		X	X
13-R-0206	X		
11-R-0141	X	X	X
11-R-0016			X
11-R-0005			X
11-R-0179			X
11-R-0082	X		
11-R-0172	X		
10-R-0113			X
11-R-0700	X		
Total number of reports identified	10	9	15

Source: OIG analysis of EPA reports. (EPA OIG table)

Distribution

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