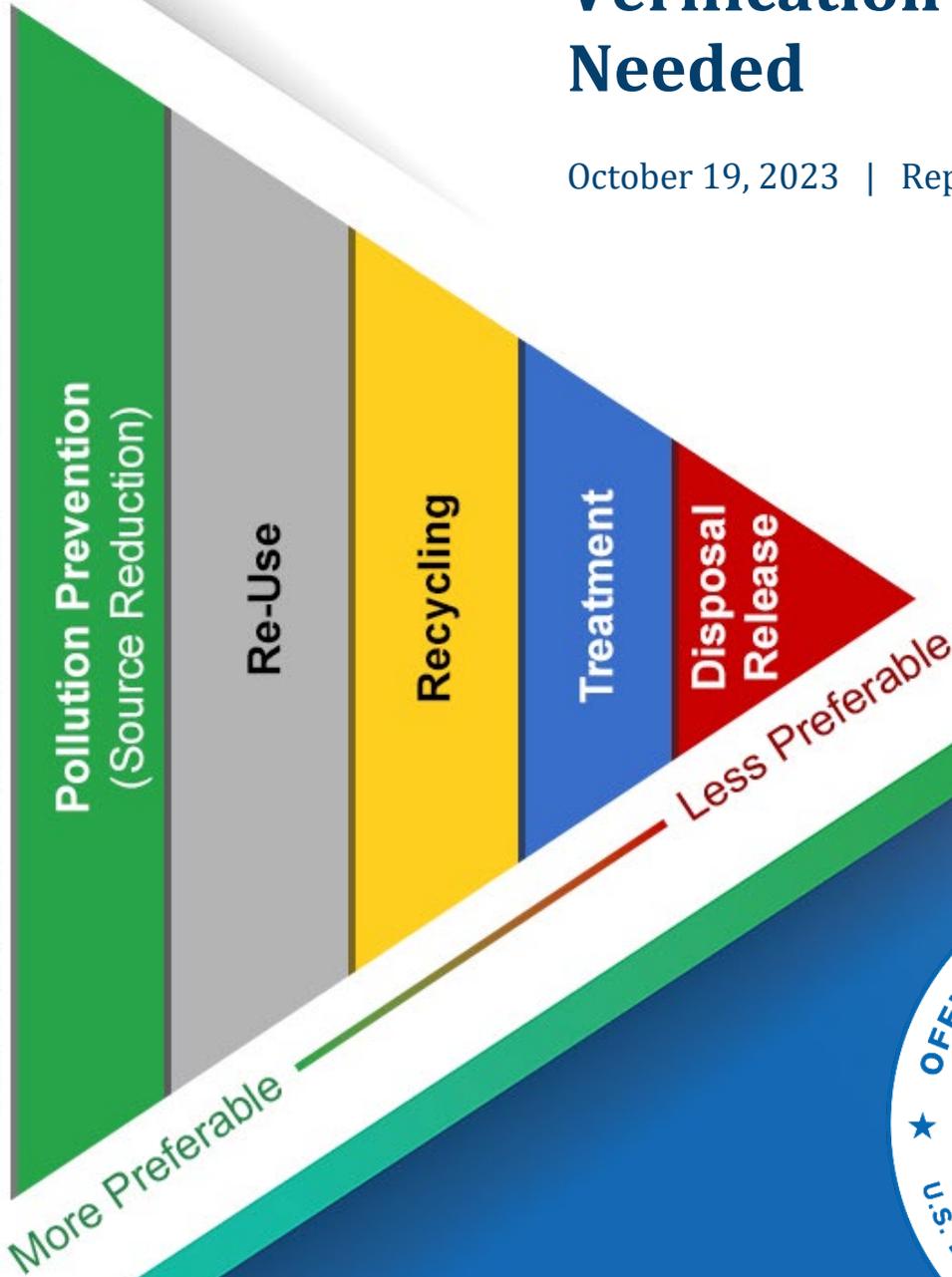


The EPA's Pollution Prevention Grant Results Aligned with Program Goals, but a Supervisory Verification Process Is Needed

October 19, 2023 | Report No. 24-P-0004

THE WASTE MANAGEMENT HIERARCHY



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Abbreviations

EPA	U.S. Environmental Protection Agency
OIG	Office of Inspector General
P2	Pollution Prevention
OPPT	Office of Pollution Prevention and Toxics
U.S.C.	United States Code

Cover Image

The waste management hierarchy, which lists the following from more preferable to less preferable: pollution prevention (source reduction), reuse, recycling, treatment, and disposal release.

(EPA OIG image)

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At a Glance

The EPA's Pollution Prevention Grant Results Aligned with Program Goals, but a Supervisory Verification Process Is Needed

Why We Did This Audit

To accomplish this objective:

The U.S. Environmental Protection Agency Office of Inspector General conducted this audit to determine whether the EPA accurately reports the environmental results from the pollution prevention grant program and whether those results demonstrate alignment with goals established for the program.

To conduct this audit, we reviewed 20 pollution prevention grants that had results reported in fiscal years 2018 or 2019.

Pollution prevention, also referred to as source reduction, is any practice that reduces, eliminates, or prevents pollution at its source. Through its pollution prevention program, the EPA awards grants to help businesses with source reduction activities. In fiscal years 2018 through 2021, pollution prevention program funds were used to award 89 grants totaling \$18,697,623. The pollution prevention program, within the Office of Pollution Prevention and Toxics, implements the Pollution Prevention Act. The Act requires the EPA to establish means for measuring the effectiveness of the pollution prevention grants.

To support this EPA mission-related effort:

- *Operating efficiently and effectively.*

To address this top EPA [management challenge](#):

- *Mitigating the causes and adapting to the impacts of climate change.*

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[List of OIG reports.](#)

What We Found

The EPA environmental results and monetary benefits of all 20 grants we reviewed aligned with the goals of the pollution prevention, or P2, program: conserve natural resources, decrease releases of toxics to the environment, and increase cost savings for businesses and others.

The EPA accurately reported results for 18 of these 20 grants, which means that the results were free from errors that would misrepresent the grant results. For the two remaining grants, the EPA did not include the results or inaccurately reported the results in its documentation. Therefore, the EPA could not demonstrate all the environmental results and monetary benefits of the two grants. In addition, we also found two examples in which the EPA did not consistently report P2 grant results across its different reporting documentation; for example, in these two instances, we found that the results the EPA reported in its quality assurance review documentation were inaccurate or missing from its reporting summary spreadsheets.

We reviewed P2 program guidance and found that it does not describe a process for supervisors to verify the reported grant results before the Office of Pollution Prevention and Toxics staff incorporates them into public reports. A supervisory verification process could help detect missing or inaccurate grant results. Without a supervisory verification process, the program may report inaccurate P2 grant results to the public. For example, the program may publish inaccurate information on the EPA website, in program justifications, and in public outreach materials. Inaccurate environmental results and monetary benefits of the grants could lead to uncertainty about the achievement of program goals. The fact that the P2 program received \$100 million in Infrastructure Investment and Jobs Act funding from fiscal years 2022 through 2026 heightens the importance of this issue.

The EPA's P2 grant results aligned with program goals, but without a supervisory verification process, the program may report inaccurate grant results to the public.

Recommendation and Planned Agency Corrective Actions

We recommend that the Office of Chemical Safety and Pollution Prevention establish guidance for a process in which the supervisors at the Office of Pollution Prevention and Toxics verify the accuracy of their staff's quality assurance review work prior to publishing pollution prevention grant results. The Agency agreed with our recommendation and provided an acceptable planned corrective action with an estimated completion date. We consider the recommendation resolved with corrective action pending. The Agency also provided technical comments, which we considered and incorporated as necessary.



OFFICE OF INSPECTOR GENERAL
U.S. ENVIRONMENTAL PROTECTION AGENCY

October 19, 2023

MEMORANDUM

SUBJECT: The EPA's Pollution Prevention Grant Results Aligned with Program Goals, but a Supervisory Verification Process is Needed
Report No. 24-P-0004

FROM: Sean W. O'Donnell, Inspector General *Sean W O'Donnell*

TO: Michal Ilana Freedhoff, Assistant Administrator
Office of Chemical Safety and Pollution Prevention

This is our report on the subject of pollution prevention grants reporting conducted by the U.S. Environmental Protection Agency Office of Inspector General. The project number for this audit is [OA-FY21-0225](#). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

In accordance with EPA Manual 2750, your office provided acceptable planned corrective actions and estimated milestone dates for Recommendation 1. This recommendation is resolved. A final response pertaining to this recommendation is not required; however, if you submit a response, it will be posted on the OIG's website, along with our memorandum commenting on your response.

We will post this report to our website at www.epaoig.gov.

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Chapter 1

Introduction

Purpose

The U.S. Environmental Protection Agency Office of Inspector General [initiated](#) this audit to determine whether the EPA accurately reports the environmental results achieved from pollution prevention grants and whether those results demonstrate alignment with the goals established for the program.

Top management challenge addressed

This audit addresses the following top management challenge for the Agency, as identified in the OIG's *U.S. Environmental Protection Agency Fiscal Year 2023 Top Management Challenges [report](#)*, issued October 28, 2022:

- Mitigating the causes and adapting to the impacts of climate change.

Background

The EPA defines pollution prevention, or P2, as “any practice that reduces, eliminates, or prevents pollution at its source.” Also known as source reduction, P2 results in less waste to control, treat, or dispose of. Some examples of P2 practices include conserving water and energy, reusing materials, and using nontoxic or less toxic chemicals as cleaners. P2 can be applied to all potential and actual pollution-generating activities—including those found in the energy, agriculture, consumer, and industrial sectors, and in homes and schools. According to the EPA, P2 reduces both financial and environmental costs and is essential for preserving wetlands, groundwater sources, and critical ecosystems.

The EPA awards P2 grants to states, colleges, and universities, and to federally recognized tribes and intertribal groups. The awardees then provide technical assistance or training, or both, to businesses to help them develop and adopt source reduction practices. As of fiscal year 2016, the EPA releases a biennial request for proposals that serves as the announcement by which entities can begin applying for grant funds. P2 GrantsPlus is the EPA’s grant management database for managing regional projects in the P2 program. According to the EPA, the main purpose of P2 GrantsPlus is to make regional P2 projects and results transparent as elements of the P2 story by providing a place to upload and search grant results and reports. Due to an Agency-required technology update, a new P2 grants database will replace P2 GrantsPlus. As of winter 2022, the new database was under development.

Pollution Prevention Act

The Pollution Prevention Act of 1990, or P2 Act, codified in 42 U.S.C. chapter 133, was enacted as a result of several congressional findings. According to the Act, “[t]he United States of America annually produces millions of tons of pollution and spends tens of billions of dollars per year controlling this pollution.” Further, the Act states that “[a]s a first step in preventing pollution through source reduction, the Environmental Protection Agency must establish a source reduction program which collects and

disseminates information, provides financial assistance to States, and implements the other activities provided for in [42 U.S.C. chapter 133].” The EPA is the sole Agency charged with the enforcement of the P2 Act. The P2 Act governs the EPA’s P2 program, provides a directive and corresponding criteria to “make matching grants to States for programs to promote the use of source reduction techniques by businesses,” and requires that the EPA establish “appropriate means for measuring the effectiveness of the State grants.”

Pollution Prevention Program Budget

Federal agencies create budget requests and submit them to the Office of Management and Budget each year. The Office of Management and Budget considers agencies’ requests as it develops the president’s budget proposal. The president submits the proposal to Congress early the next year, and agencies then submit written justifications of their budget requests to the appropriate congressional committees. Although Congress is not required to adopt the president’s budget, Congress must pass, and the president must sign, annual appropriations legislation funding government operations pursuant to an enacted budget.

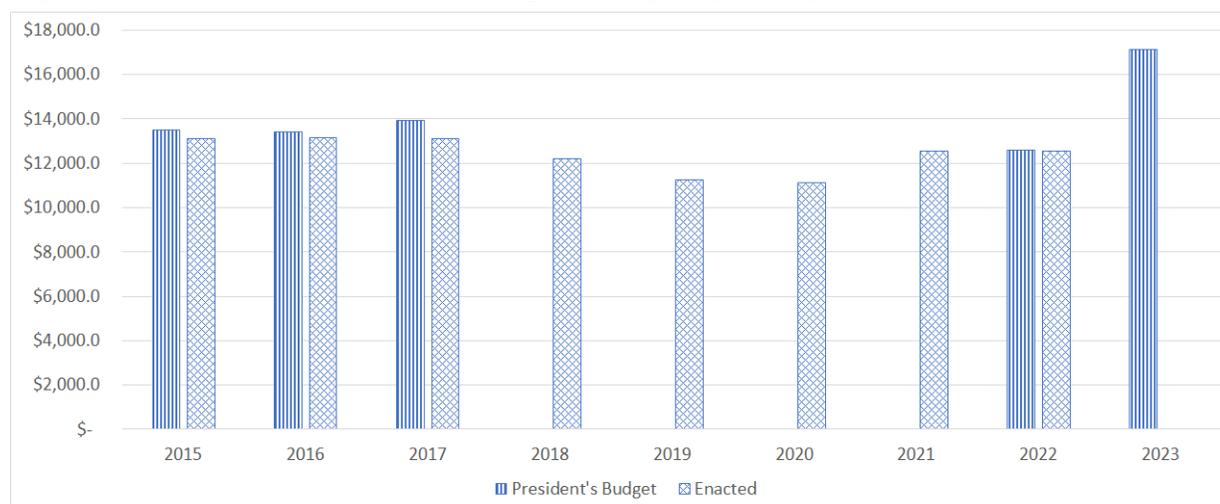
For fiscal years 2018 through 2021, the EPA proposed to eliminate the P2 program from the president’s budget. The EPA’s fiscal year 2018 *Justification of Appropriation Estimates for the Committee on Appropriations* explained that “[b]ased on previous investments in P2 solutions made under this program/project, partners are expected to be able to continue to share best practices and seek additional pollution prevention solutions.”¹ Additionally, the justification included a note for fiscal years 2020 through 2021, which stated that the “EPA will continue to meet core statutory requirements under the Pollution Prevention Act of 1990 in other programs.” Despite the proposed elimination of the program in the president’s budget, Congress continued to fund it. In fiscal years 2018 through 2021, P2 program funds were used to award 89 grants totaling \$18,697,623.

Figure 1 shows the president’s and enacted budget for fiscal years 2015 through 2023.² As shown in the figure, for fiscal years 2018 through 2021, the president’s budget requested \$0 for the P2 program. The enacted budget for the program steadily declined from \$13.1 million in fiscal year 2016 to \$11.1 million in fiscal year 2020. On November 15, 2021, Congress passed the Infrastructure Investment and Jobs Act. The P2 program received a total of \$100 million in Infrastructure Investment and Jobs Act funding for fiscal years 2022–2026.

¹ The EPA’s budget justification documents for fiscal years 2019 through 2021 contained similar text.

² In the fiscal year 2023 *Justification of Appropriation Estimates for the Committee on Appropriations*, the fiscal year 2023 president’s budget increased to \$17,121,000 and stated, “Work in this program directly supports Goal 7/Objective 7.2, Promote Pollution Prevention in the FY 2022 – 2026 EPA Strategic Plan.”

Figure 1: President’s and enacted P2 program budget by fiscal year (dollars in thousands)



Source: OIG summary of fiscal years 2015–2023 EPA budget justification documents. (EPA OIG image)

Pollution Prevention Goals and Measures

The Office of Management and Budget Circular No. A-123, *Management’s Responsibility for Enterprise Risk Management and Internal Control*, states that federal leaders and managers are responsible for establishing and achieving goals and objectives. Appendix A to Office of Management and Budget Circular No. A-123 states that “management has responsibility in determining risk to achieving reporting objectives and aligning the level of control activities to provide reasonable assurances” that these are met. According to the appendix, materiality for controls is defined as the risk of error or misstatement that would impact management’s or users’ decisions or conclusions.

National emphasis areas are the priorities that P2 grants are designed to accomplish. The EPA sets national emphasis areas or P2 goals to ensure that P2 grants reflect national environmental themes and priorities and direct resources and funds to generate more impactful and measurable results. For this report, we use the terms priorities and P2 goals interchangeably to refer to what the P2 grants are designed to accomplish. According to the EPA’s pollution prevention website, “measuring grantee results is one way to determine the success of technical assistance or a training effort.” The EPA defines P2 grant results to include metrics that are the outcome measures of the pollution prevention program. In 2006, P2 grantees began publicly reporting the environmental benefits and monetary results of grants. They report the following measures:

- Reductions in hazardous releases and hazardous inputs, measured in pounds.
- Reductions in greenhouse gas releases, measured in metric tons of carbon dioxide equivalent.
- Reduced water consumption, measured in gallons.
- Cost savings associated with reducing hazardous pounds, greenhouse gas releases, and water consumption.

The EPA has a quality assurance process for collecting and reporting the P2 grant results that grantees submit. We outline this process in Figure 2. First, grantees submit the results of their P2 efforts to the EPA regional offices. Next, the EPA grant project officers in the regional offices review the reported results. The regional offices then summarize the results and provide the summaries to the Office of Pollution Prevention and Toxics, or OPPT, in EPA headquarters. OPPT staff perform a quality assurance review of the regional offices' reported results. The OPPT then compiles and publicly reports the results of this quality assurance review.

Figure 2: Quality assurance review process steps



Source: OIG depiction of grant results quality assurance review. (EPA OIG Image)

Responsible Office

The OPPT manages programs under the Toxic Substances Control Act and the P2 Act. The OPPT is within the Office of Chemical Safety and Pollution Prevention.

Scope and Methodology

We conducted this performance audit from July 2021 to May 2023 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We assessed the internal controls necessary to satisfy our audit objectives.³ In particular, we assessed the internal control components—as outlined in the U.S. Government Accountability Office's *Standards for Internal Controls in the Federal Government*—significant to our audit objectives. Any internal control deficiencies we found are discussed in this report.

To answer whether the EPA accurately reports the environmental results from P2 grants and whether those results demonstrate alignment with goals established for the program, we reviewed the

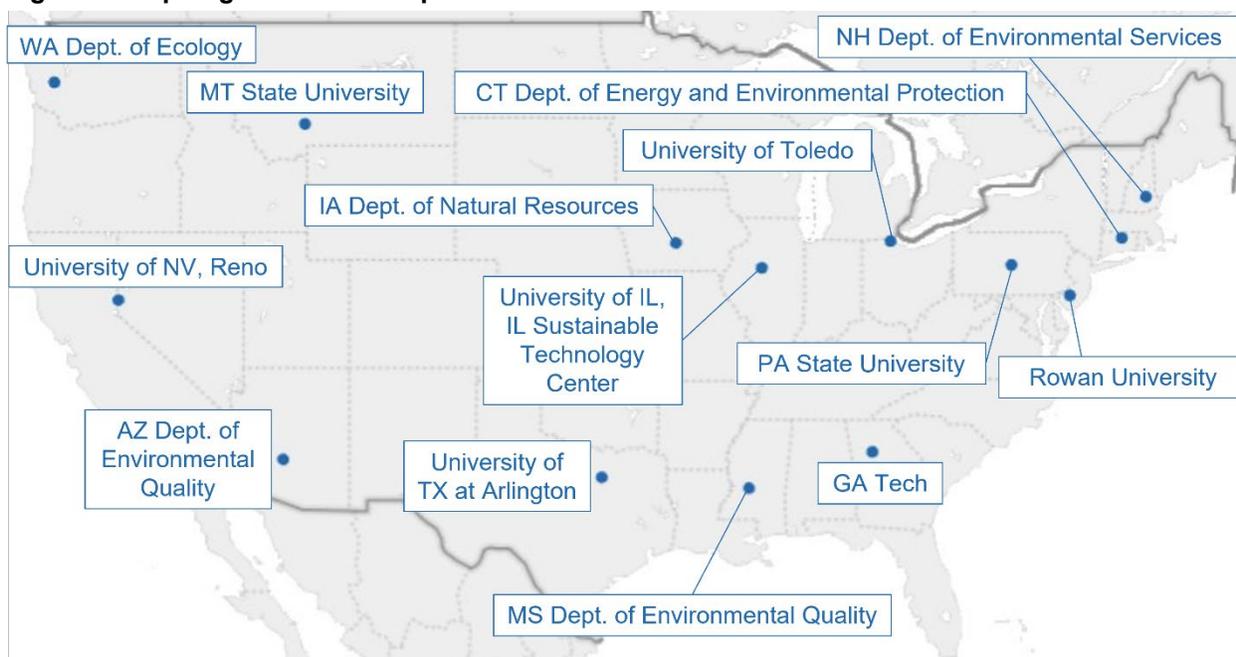
³ An entity designs, implements, and operates internal controls to achieve its objectives related to operations, reporting, and compliance. The U.S. Government Accountability Office sets internal control standards for federal entities, *Standards for Internal Control in the Federal Government* (also known as the “Green Book”), issued September 10, 2014.

requirements under the P2 Act, the Department of Homeland Security's records directive and the Office and Management and Budget records memorandum, the EPA's P2 program websites, P2 grant program guidance, and the EPA's budget documentation. At the start of our audit, we interviewed OPPT management and staff to understand how the P2 grant program operates and request documentation, such as training materials, P2 measurement guidance, and quality management plans and reported grant results for fiscal years 2018–2019. In addition, we requested and received access to the program's grant management system, P2 GrantsPlus, to confirm the completeness of our grant documentation request to the Agency and to check the grant results that the EPA staff put into the grant management system.

To determine the accuracy of the grant results reported and whether those results aligned with program goals, we sampled P2 grants with results reported to the EPA for fiscal years 2018 through 2019. At the time of our audit, these were the most recent fiscal years that had grants with results reported to the EPA. We analyzed whether the EPA accurately reported the results the grantees provided in its P2 grant reporting documentation; specifically, we analyzed whether the results that the EPA reported were free from errors that would misrepresent the grant results. We planned to review all 89 P2 grants with results reported for fiscal years 2018 to 2019, but OPPT management stated that gathering work plans for all 89 grants would increase the burden of collecting supporting documentation for regional office staff. Therefore, we reduced our sample size from 89 grants to 20 judgmentally selected grants. In other words, we chose which grants to include based on our own assessment rather than statistical sampling techniques. Specifically, from the grants with results reported in fiscal years 2018 and 2019,⁴ we selected one grant from each of the two fiscal years for each of the ten EPA regions, with six of the regions having the same grantee selected both fiscal years. For simplicity, we refer to our sample size as 20 grants. The grants we chose were those that had the highest dollar value. See Figure 3 for a map of the grantee locations in our sample. The EPA provided the grant documentation needed for the 20 grants in our sample. See Figure 3 for a map of the grantees in our sample.

⁴ The pollution prevention grants with results reported in fiscal years 2018 and 2019 include grants that were awarded in fiscal years 2016 and 2017.

Figure 3: Map of grantees in sample



Note: The following grantees were sampled in both fiscal year 2018 and 2019: the Iowa Department of Natural Resources, Montana State University, Pennsylvania State University, Rowan University, the University of Texas at Arlington, and the Washington Department of Ecology.

Source: OIG depiction of grantees. (EPA OIG image)

We analyzed the following grant documentation from P2 GrantsPlus and the Agency:

- **Work plans**—documentation that the grantee submits. Work plans include a project summary, national emphasis areas, and information on programmatic capability and environmental results.
- **Semiannual progress or final technical reports**—a semiannual report summarizes the grant outputs. A final technical report should include a summary of the project task(s), the milestones and results achieved, and the costs of the project(s), as well as a description of successes, problems, and lessons learned from the project(s). A semiannual and a final technical report are required.
- **Headquarters grant results documents**—documents that the OPPT uses in its review of grant results that include information on gallons of water saved, hazardous materials reduced, dollars saved, or other metrics.

Prior Reports

In EPA OIG Report No. [15-P-0276](#), *EPA Needs Accurate Data on Results of Pollution Prevention Grants to Maintain Program Integrity and Measure Effectiveness of Grants*, issued on September 4, 2015, we determined how the EPA has ensured pollution prevention goals are achieved through P2 grants. We recommended that the assistant administrator for Chemical Safety and Pollution Prevention: (1) implement the P2 GrantsPlus database to begin the process for enhancing the reporting and

recording of its P2 grants, and (2) develop and implement controls to ensure accurate reporting of regional results to headquarters and documentation of revisions made by headquarters. The EPA agreed with our recommendations and proposed acceptable corrective actions. The Agency reported that all corrective actions have been completed.

In EPA OIG Report No. [09-P-0088](#), *Measuring and Reporting Performance Results for the Pollution Prevention Program Need Improvement*, issued on January 28, 2009, we sought to verify the accuracy of P2 Program data provided for Office of Management and Budget's 2006 Program Assessment Rating Tool evaluation and determine what actions have been taken to address the recommendations in the Program Assessment Rating Tool program improvement plan. We recommended developing performance metrics, a *P2 Division Quality Assurance Project Plan* for data collection and reporting, and a program improvement plan. The Agency officials agreed with all the recommendations and reported that all corrective actions have been completed.

Chapter 2

Pollution Prevention Grant Results Aligned with Program Goals and Most Reported Results Were Accurate

The environmental results and monetary benefits of all 20 grants we reviewed aligned with the goals of the P2 program: conserve natural resources, decrease releases of toxics to the environment, and increase cost savings for businesses and others. The EPA accurately reported results for 18 of the 20 grants, which means that the results were free from errors that would misrepresent the grant results. For the two remaining grants, the EPA did not include the results or inaccurately reported the results in its documentation. Therefore, the EPA could not demonstrate all the environmental results and monetary benefits of the two grants. In addition, we also found two examples in which the EPA did not consistently report P2 grant results across its different reporting documentation; for example, in these two instances, we found that the results EPA reported in its quality assurance review documentation were inaccurate or missing from its reporting summary spreadsheets.

We reviewed P2 program guidance and found that it does not describe a process for supervisors to verify the reported grant results before OPPT staff incorporate the results into public reports. A supervisory verification process could help detect missing or inaccurate grant results. Without a supervisory verification process, the program may report inaccurate P2 grant results to the public. For example, the program may include inaccurate information on the EPA website, in program justifications, and in public outreach materials. Inaccurate environmental results and monetary benefits of the grants could lead to uncertainty about the achievement of program goals.

Pollution Prevention Grants Should Address EPA Strategic Goals

In general, the EPA awards grants to address its strategic goals. The strategic goal for the P2 program is to reduce the amount of pollution and waste produced. The program aims to do this by awarding grants to states and tribes to provide businesses with technical assistance to help them develop and adopt P2 practices. In fiscal years 2016–2017 and 2018–2019, the EPA required P2 grant program applicants to meet one or more of the EPA's national emphasis areas as the basis for their P2 grant proposals. National emphasis areas reflect national environmental themes and priorities. The national emphasis areas for the fiscal years within the scope of our audit were as follows.

Fiscal years 2016–2017 national emphasis areas:

- Climate change mitigation/prevention of greenhouse gas emissions.
- Food manufacturing and processing.
- State or community approaches to hazardous materials source reduction.

Fiscal years 2018–2019 national emphasis areas:

- Business-based pollution prevention solutions supporting Toxic Substances Control Act priorities and chemical safety.
- Food and beverage manufacturing and processing.
- Hazardous materials source reduction approaches in states or communities.

To support program goals, the OPPT reviews P2 grant results that grantees submit to the EPA and compile them in the following:

- **Quality assurance document**—describes the performance measure result adjustments made by the OPPT to ensure that the measures reported by grantees adhere to the EPA reporting guidance. The document also has screenshots from P2 GrantsPlus.
- **Regional results summary spreadsheets**—contains the adjusted final performance measure results for each grantee project in a region.

Pollution Prevention Grant Results Aligned with Program Goals

The Agency provided us the grant documentation and results reported in fiscal years 2018 and 2019 for the 20 P2 grants in our sample. We compared this information with the national emphasis areas listed in the EPA’s request for proposal and the grant work plans. We found that all grant results aligned with the P2 program goals. The callout boxes in this chapter have examples of P2 grant results.

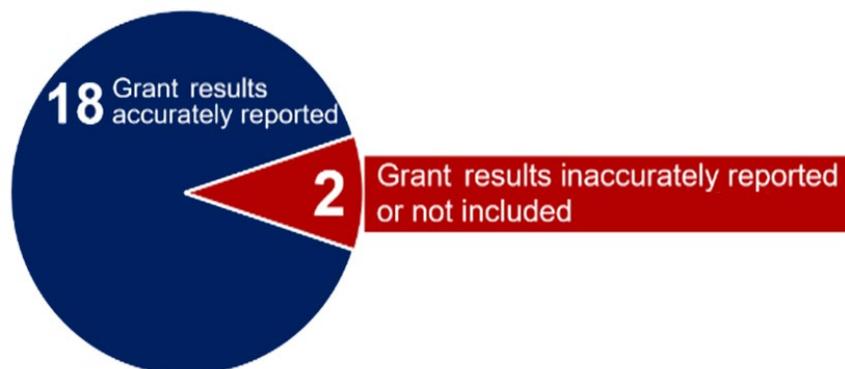
P2 Grant Results for the University of Illinois, Illinois Sustainable Technology Center, 2019:

The University of Illinois, Illinois Sustainable Technology Center’s grant purpose was to provide on-site P2 technical assistance within Illinois’s underserved communities and businesses by reducing water, energy and hazardous materials use and by lowering greenhouse gas emissions and costs. According to the grantee, this project supported two national emphasis areas on its Request for Proposals: *Climate Change Mitigation/Prevention of Greenhouse Gas Emissions* and *Food Manufacturing and Processing*. This grant had a reduction of 15,435 metric tons of carbon dioxide equivalent, 548,288 gallons of water and a cost savings of \$1,504,063.

Most Reported Results Were Accurate

During our analysis of the results reported, we found that the grantees submitted the results to the EPA and the EPA accurately reported the results that the grantees submitted for 18 of the 20 grants, as exhibited in Figure 4. The results reported for these grants were free from any errors that would misrepresent the grant results. For the two remaining grants, the EPA did not include the results or inaccurately reported the results in its documentation.

Figure 4: Number of grant results the EPA did or did not accurately report in sample



Source: OIG depiction of grant results reported in sample. (EPA OIG image)

For grant number NP96344901, the EPA awarded Pennsylvania State University \$180,000. The purpose of the grant was to deliver a complete set of activities to continue economy, energy, and environment best management practices in Pennsylvania. These activities included technical assistance, events, and webinars that explained the Resource Conservation and Recovery Act definition of “solid waste” exclusions for Toxics Release Inventory reporting. We found that two results for this grant were not included in quality assurance calculations. The two results were 25,100 kilowatt hours per year in energy savings and \$36,600 in monetary benefits from grant activities. We found no evidence that the OPPT reported these grant results in its quality assurance document, in its regional results summary spreadsheet, or in P2 GrantsPlus. In the Agency’s technical comments on our draft report, the Agency stated that the \$36,600 in monetary benefits should have been \$2,234 based on measurement guidance. However, the \$2,234 in monetary benefits was also not included in quality assurance calculations. Therefore, the reported results were inaccurate.

For grant number NPO0A00149, the EPA awarded the Connecticut Department of Energy and Environmental Protection \$160,000. The purpose of the grant was to reduce energy use and greenhouse gas emissions from healthcare facilities, promote sustainability to dry cleaners and communities, publish the *P2 View* and *Your Environmental Connection* quarterly newsletters, and support a green lodging project and continuous improvement in P2 sector outreach materials and data collection. To fulfill the grant’s purpose, the Connecticut Department of Energy and Environmental Protection performed four separate projects. We found that the OPPT did not perform a quality assurance review for the results of one of the four grant projects. Additionally, we found that the OPPT did not complete its quality assurance document and regional results summary spreadsheet for the project. Therefore, the OPPT could not demonstrate all the environmental results and monetary benefits of this grant.

We also found two examples in which the OPPT reported the results in the quality assurance document and P2 GrantsPlus system but missed or inaccurately reported the results in the regional results summary spreadsheet. This demonstrated inconsistencies in the OPPT’s documentation. We notified the OPPT about the two grants with unreported results and the inconsistencies across different grant documents. The OPPT confirmed the errors.

P2 Grant Results for the Arizona Department of Environmental Quality, 2019

The Arizona Department of Environmental Quality intended to expand “outreach activities and technical assistance to Arizona facilities by partnering with student interns from Arizona State University (ASU) to target the hotel section of the hospitality industry in Arizona. The goal is to provide technical assistance and training to hotels and motels to reduce waste and increase energy and water conservation.” Per the grantee, this project supported all national emphasis areas on the grantee’s request for proposal: “prevention of greenhouse gas emissions, food manufacturing, and hazardous materials source reduction.” Additionally, the project had a reduction of 31,317 pounds of hazardous waste; 922 metric tons of carbon dioxide equivalent; and 31,432,105 gallons of water; and produced a cost savings of \$374,097.

A Lack of Guidance for Supervisory Review of Staff Work Led to Missing or Inaccurately Reported Results

There was no indication that a supervisory review to verify the reported grant results occurred. We analyzed 15 program guidance documents, detailed in Appendix A, and found no guidance for a supervisory review of quality assurance documents to validate that all grant results are reported and free from material errors.

Per Office of Management and Budget Circular No. A-123, it is management’s responsibility to have control activities that provide reasonable assurances that program goals are met. Having guidance for a process for management to verify the results before they are reported to the public could help detect missing or inaccurately reported results and serve as a control activity that provides reasonable assurance about what the EPA publicly reports regarding the P2 program’s grant results.

No Guidance for a Process to Verify the Completeness and Accuracy of Results Can Lead to Uncertainty About the Achievement of Program Goals

Although P2 grants may align with program goals, missing or inaccurately reported grant results inhibit the EPA’s ability to verify that the grants achieved P2 grant goals. In the two cases of unreported results, the EPA provided \$340,000 in total for the grants. Because the EPA did not report the results, we cannot confirm whether the grant goals were fully achieved. Without a supervisory verification process, the program may report inaccurate environmental results and monetary benefits of P2 grant results to the public.

Conclusions

The OPPT has a quality assurance process for collecting and reporting P2 grant results that grantees submit to the EPA, but nonsupervisory OPPT staff perform this process. Supervisors do not verify the accuracy of grant results before publicly reporting the results. Guidance on how supervisors should review their staff’s work will strengthen the program’s quality assurance process and improve the accuracy of the grant results that the EPA reports on its website, in program justifications, and in public outreach materials. The P2 program received \$100 million in Infrastructure Investment and Jobs Act funding, making it imperative that the program accurately demonstrate the environmental results or monetary benefits of P2 grants.

Recommendation

We recommend that the assistant administrator for the Office of Chemical Safety and Pollution Prevention:

1. Establish guidance for a process in which the supervisors in the Office of Pollution Prevention and Toxics verify the accuracy of their staff's quality assurance review work prior to publishing pollution prevention grant results.

Agency Response and OIG Assessment

Appendix B contains the Office of Chemical Safety and Pollution Prevention's response to our draft report. The Office of Chemical Safety and Pollution Prevention also provided technical comments, which we considered and incorporated as necessary when we finalized this report. The Office of Chemical Safety and Pollution Prevention agreed with our recommendation and provided an acceptable planned corrective action plan and estimated completion date. Specifically, the Office of Chemical Safety and Pollution Prevention stated that it will establish guidance for a process for supervisors to use a representative sampling approach to verify the accuracy of staff's quality assurance review work prior to publishing P2 grant results. The office also stated that based on the sampling results, it will adjust the frequency of supervisor verification as needed. We believe that the proposed corrective action will satisfy the intent of the recommendation. Therefore, we consider the recommendation resolved with corrective action pending.

In response to the draft report, the Agency provided technical comments concerning the draft report's Appendix A titled, *Pollution Prevention Act Reporting Requirement*, which was deleted from this report. We had observed in our draft report that "[p]ursuant to 42 U.S.C. section 13107, the EPA was required to submit a report to Congress with certain information within 18 months after enactment of the P2 Act, followed by biennial reports thereafter containing certain other P2 information." Although the P2 Act specifies that "Each biennial report ... after the first report shall contain each of [nine categories of information]," the P2 Act also states that, "[i]n the report following the first biennial report," seven of those categories "may be included at the discretion of the Administrator." Appendix A of our draft report discussed the OIG's and EPA's differing interpretations regarding this text. In response to our draft report, the Office of Chemical Safety and Pollution Prevention provided legislative history that specifically addressed the P2 Act text at issue. Although the legislative history pertained to a bill that was not enacted, the legislative history discussed bill text that mirrors what was enacted as the P2 Act in Pub. L. 101-508 (1990).⁵ We agreed that this legislative history was relevant and supported the Agency's interpretation, and we removed the reporting requirement appendix from the final report.

⁵ The Office of Chemical Safety and Pollution Prevention provided S. REP. 101-526 (1990), which pertained to S. 585, "Pollution Prevention Act of 1990," a bill that was not enacted.

Status of Recommendation

Rec. No.	Page No.	Recommendation	Status*	Action Official	Planned Completion Date
1	12	Establish guidance for a process in which the supervisors in the Office of Pollution Prevention and Toxics verify the accuracy of their staff's quality assurance review work prior to publishing pollution prevention grant results.	R	Assistant Administrator for Chemical Safety and Pollution Prevention	1/31/24

- * C = Corrective action completed.
- R = Recommendation resolved with corrective action pending.
- U = Recommendation unresolved with resolution efforts in progress.

OIG Analysis of the Office of Chemical Safety and Pollution Prevention’s Standard Operating Procedures, Guidance, and Training Materials

File	Purpose
Office of Chemical Safety and Pollution Prevention Final FY 2016-2017 National Program Manager Guidance	Sets “forth the strategies and actions the EPA and its state and tribal partners will undertake to protect human health and the environment.”
Office of Chemical Safety and Pollution Prevention National Program Manager Guidance Fiscal Years 2018-2019	Sets “forth the strategies and actions the EPA and its state and tribal partners will undertake to protect human health and the environment.”
Final Office of Chemical Safety and Pollution Prevention National Program Guidance Fiscal Year 2020-2021	Sets “forth the strategies and actions the EPA and its state and tribal partners will undertake to protect human health and the environment.”
Tip Sheet 2018	A “tip sheet to reduce errors in P2 Grants Plus metrics.”
Regional P2 Measurement Guidance, Collecting and Reporting Results	Provides regions definition of terms, useful measurement tools for greenhouse gas reductions, cost savings and pound reductions, information on the P2 GrantsPlus database, a commitment schedule, and guidelines related to the following: <ol style="list-style-type: none"> 1. “Projected results” 2. “Actual results” 3. “Annual results” 4. “Quality Assurance Project Plan” 5. Eligible results 6. “Itemized results”
Application Review Materials, including the following: FY18-19 P2 Grants: Proposal Review Training, FY20-21 P2 Grants: Application Review Training, National Review of FY18-19 P2 Grant Proposals, and National Review of FY20-FY21 P2 Grant Applications.	Provides proposal review training and the national review process of grant proposals for FYs 2018–2019 and FYs 2020–2021.
Documenting P2 Best Practices and Innovations: Part 1 Grant Reporting Requirements	Discusses performance reporting requirements.
Reporting Pollution Prevention Results to the US EPA for Fiscal Year 2020	Provides information on grantee reporting.
P2 Measures and Reporting Requirements, EPA P2 Meeting – Session 4 December 17, 2020	Provides information on “P2 outcome measures,” “key documents,” and “Required facility-level follow-up and report formatting.”
Basic Orientation Video for P2 GrantsPlus	Provides information for the regions on how to use GrantsPlus.
Regional P2 Reporting Guidance: Measuring and Reporting P2 Results	Provides terms and guidelines for the regions to: <ol style="list-style-type: none"> 1. “Set reporting expectations for grantees in four areas.” 2. “Meet program expectations for reporting new annual results to HQ [headquarters].” 3. “When reporting, know which entities’ results to include or exclude.” 4. “When reporting results, know when to count less than 100%.” 5. “When reporting results, know what [the EPA is] measuring.”
P2 Grants and Grantee Process and Database Needs	Provides a “Detailed Description of P2 Grant Process, Grantees Technical Assistance, Data Entry and later use of Info.”

Source: OIG analysis and summary of the Office of Chemical Safety and Pollution Prevention’s standard operating procedures, guidance, and training materials. (EPA OIG table)

Agency Response to Draft Report



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MEMORANDUM

SUBJECT: Response to Draft Report entitled “The EPA’s Pollution Prevention Grant Results Aligned with Program Goals, but a Supervisory Verification Process is Needed.”

FROM: Michal I. Freedhoff, Ph.D.
Assistant Administrator

MICHAL FREEDHOFF
Digitally signed by MICHAL
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Date: 2023.06.29 09:25:44 -04'00'

TO: Sean W. O’Donnell
Inspector General

This memorandum provides EPA’s response to the Office of Inspector General (OIG) Draft Report entitled “The EPA’s Pollution Prevention Grant Results Aligned with Program Goals, but a Supervisory Verification Process is Needed,” Report No. OA-FY21-0225, dated May 12, 2023.

I. General Comments

EPA’s Office of Chemical Safety and Pollution Prevention (OCSPP) appreciates the OIG’s effort in evaluating:

- “[W]hether the EPA accurately reports the environmental results from the pollution prevention grant program and whether those results demonstrate alignment with goals established for the program.”

OCSPP agrees that appropriate oversight of the reporting of environmental results is important and necessary for the pollution prevention (P2) grant program to demonstrate auditable environmental results and benefits to the public, and accordingly we are proposing corrective actions to implement the OIG’s recommendation for increased supervisory oversight.

OCSPP's strong commitment to accurate reporting and data integrity is evident in its data review process for the P2 grants program. The P2 grant program has for several years implemented a grant reporting process that includes multiple levels of oversight at both the regional and headquarters levels. This detailed oversight process culminates with careful review of the data by a supervisory-equivalent (GS-15) subject matter expert with general experience in grant reporting and with specialized and focused experience in P2 grant reporting.

More specifically, EPA's oversight process for P2 grants reporting is as follows:

- Quality assurance (QA) review of P2 grantee reporting by EPA grant project officers in EPA regional offices.
- An intensive second round QA review by a headquarters-based Office of Pollution Prevention and Toxics (OPPT) supervisory-equivalent (GS-15) subject matter expert. This reviewer is a senior staff member person with more than a decade of experience reviewing P2 grant reporting at the GS level equivalent to a Branch Chief.
- An additional opportunity for regional grant project officers to review and comment on OPPT senior staff QA findings.
- A final QA discussion of the results between the OPPT subject matter expert and the Sustainability and Pollution Prevention (SPPB) Branch Chief to resolve any final QA issues.

The OIG's Draft Report demonstrates that EPA's process for reviewing P2 grants ensures consistently accurate results, but that the process has some room for improvement. In nearly all the grants reviewed by the OIG, "the results were free from errors that would misrepresent the grant results." Moreover, the OIG found virtually no instances of misapplied quality assurance rules, calculations, or other inaccuracies once a project was in the second round of review conducted by the GS-15 headquarters QA subject matter expert. Implementation of EPA's planned online Pollution Prevention Grants Reporting Database will further enhance the accuracy of the reporting process and reduce the resources required for effective QA of P2 grant program results. As an additional safeguard, OCSPP will establish guidance for a process in which OPPT supervisors use a sampling approach to verify the accuracy of their staff's QA review work prior to publishing P2 grant results.

We have attached OCSPP's Technical Comments to this response, which we respectfully request remain internal to EPA. These comments include corrections and proposed language changes, including a request to remove Appendix A as being outside of the scope and purpose for the audit and not comporting with EPA's reasonable interpretation of the PPA § 6608(b) reporting provision.

II. OCSPP's Response to the Recommendations

Recommendation 1: *We recommend that the Office of Chemical Safety and Pollution Prevention establish guidance for a process in which the supervisors at the Office of Pollution Prevention and Toxics verify the accuracy of their staff's quality assurance review work prior to publishing pollution prevention grant results.*

- **Discussion:** EPA agrees. In addition to the recommended guidance, OCSPP is confident that implementation of the planned online Pollution Prevention Grants Reporting Database will further enhance the accuracy of the reporting process and reduce the resources required for effective QA of the P2 grant program results.
- **Proposed Corrective Action 1:** OCSPP will establish guidance for a process in which OPPT supervisors use a representative sampling approach to verify the accuracy of their staff's QA review work prior to publishing P2 grant results and based on the sampling results, adjust the frequency of supervisor verification as needed.
- **Target Completion Date:** January 31, 2024.

Thank you for the opportunity to comment on the Draft Report. If you have questions, please contact Janet L. Weiner, OCSPP's Senior Audit Liaison at weiner.janet@epa.gov.

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U.S. Environmental Protection Agency

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