



U.S. ENVIRONMENTAL PROTECTION AGENCY

## OFFICE OF INSPECTOR GENERAL

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

# Resource Constraints, Leadership Decisions, and Workforce Culture Led to a Decline in Federal Enforcement

Report No. 21-P-0132

May 13, 2021

Primary purpose of the enforcement process is to ensure compliance with environmental laws



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## Abbreviations

C.F.R.	Code of Federal Regulations
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CWA	Clean Water Act
DOJ	U.S. Department of Justice
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FOIA	Freedom of Information Act
FTE	Full-Time Equivalent
FY	Fiscal Year
GAO	U.S. Government Accountability Office
ICIS	Integrated Compliance Information System
NPDES	National Pollutant Discharge Elimination System
OECA	Office of Enforcement and Compliance Assurance
OIG	Office of Inspector General
RCRA	Resource Conservation and Recovery Act
SDWA	Safe Drinking Water Act
SEP	Supplemental Environmental Project
TSCA	Toxic Substance Control Act
USD	U.S. Dollar

**Cover Image:** The EPA's enforcement process includes compliance assistance, compliance monitoring, enforcement actions, and results and benefits from those enforcement actions. (EPA OIG image)

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# At a Glance

## Why We Did This Audit

The Office of Inspector General conducted this audit of the U.S. Environmental Protection Agency to identify the trends, as well as the key factors that contribute to these trends, in EPA-led enforcement actions and results from fiscal years 2006 through 2018.

The EPA works to ensure that regulated entities, such as wastewater treatment plants, pesticide manufacturers, and oil refineries, comply with environmental statutes. The EPA reports enforcement outputs, such as compliance monitoring activities and enforcement actions, and enforcement outcomes, such as penalties, injunctive relief, supplemental environmental projects, and environmental benefits, to the public each year.

### This audit addresses the following:

- *Compliance with the law.*

### This audit addresses these top EPA [management challenges](#):

- *Overseeing states implementing EPA programs.*
- *Improving workforce/workload analyses.*
- *Integrating and leading environmental justice.*

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List of [OIG reports](#).

## ***Resource Constraints, Leadership Decisions, and Workforce Culture Led to a Decline in Federal Enforcement***

### What We Found

EPA-led compliance monitoring activities, enforcement actions, monetary enforcement results, and environmental benefits generally declined from FYs 2007 through 2018 nationwide. This downward trend also occurred at the regional level and on a statute-by-statute basis. While annual enforcement measures, such as penalty dollars assessed or commitments to clean up pollution, declined, the results varied year-to-year based on the conclusion of large cases.

**A decline in the EPA's enforcement activities may expose the public and the environment to undetected harmful pollutants.**

The decline in enforcement resources was a primary driver behind the observed declining enforcement trends, resulting in fewer compliance monitoring activities and concluded enforcement actions. EPA leadership also made strategic decisions that affected enforcement trends, such as focusing limited resources on the most serious cases and, in 2017, emphasizing deference to state enforcement programs and compliance assistance. From 2006 through 2018, growth in the domestic economy and new laws increased the size and level of activity in key sectors that the EPA regulated, but the EPA's capacity to meet that need decreased.

The EPA's annual enforcement reports do not provide context for understanding the EPA's enforcement accomplishments and the impact these enforcement activities have on human health and the environment. For example, the EPA does not measure or report data for compliance-assistance activities, informal enforcement actions, and noncompliance rates. The EPA could also provide additional information that would provide context about the scope of activities captured by its enforcement measures, such as the type of inspections conducted and the types and toxicity of pollutants removed from the environment.

### Recommendations and Planned Agency Corrective Actions

We recommend that the EPA's assistant administrator for Enforcement and Compliance Assurance complete a workforce analysis to assess the Agency's capacity to maintain a strong enforcement field presence that protects human health and the environment and to integrate the results of this analysis into the Office of Enforcement and Compliance Assurance's strategic and annual planning processes. These two recommendations are unresolved. We made six recommendations about how the EPA can improve the way it reports enforcement achievements. The recommendation to measure the Agency's compliance assistance and informal enforcement activities is unresolved.



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

THE INSPECTOR GENERAL

May 13, 2021

**MEMORANDUM**

**SUBJECT:** Resource Constraints, Leadership Decisions, and Workforce Culture Led to a Decline in Federal Enforcement  
Report No. 21-P-0132

**FROM:** Sean W. O'Donnell

A handwritten signature in blue ink that reads "Sean W. O'Donnell".

**TO:** Lawrence Starfield, Acting Assistant Administrator  
Office of Enforcement and Compliance Assurance

This is our report on the subject audit conducted by the Office of Inspector General of the U.S. Environmental Protection Agency. The project number for this audit was [OA&E-FY19-0030](#). 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.

The Office of Enforcement and Compliance Assurance is the responsible office for the topics discussed in this report.

We issued eight recommendations in this report. In accordance with EPA Manual 2750, your office provided acceptable planned corrective actions and estimated milestone dates for Recommendations 3, 4, 6, 7, and 8. These recommendations are resolved.

**Action Required**

Recommendations 1, 2, and 5 are unresolved. The resolution process, as described in the EPA's Audit Management Procedures, begins immediately with the issuance of this report. Furthermore, we request a written response to the final report within 60 days of this memorandum. Your response will be posted on the OIG's website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

We will post this report to our website at [www.epa.gov/oig](http://www.epa.gov/oig).

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# Chapter 1

## Introduction

### Purpose

The Office of Inspector General conducted this audit of the U.S. Environmental Protection Agency to identify the trends in enforcement results from fiscal years 2006 through 2018 for EPA-led enforcement actions. We also sought to determine the key factors explaining those trends and the differences in enforcement results among regions and headquarters, as well as among environmental statutes.

#### Top Management Challenges

This audit addresses the following management challenges for the Agency, as identified in [20-N-0231](#), *EPA's FYs 2020–2021 Top Management Challenges*, issued July 21, 2020:

- *Overseeing states implementing EPA programs.*
- *Improving workforce/workload analyses.*
- *Integrating and leading environmental justice.*

This report is the second of two reports addressing these objectives. Our first report, issued in March 2020, described the national trends in EPA-led enforcement activities, actions, and results and contained no recommendations.<sup>1</sup> This report revisits the national trends and identifies the regional, headquarters, and statute trends in EPA-led enforcement activities, actions, and results and the key factors that explain the trends identified in our reports.

### Background

The EPA's mission is to protect human health and the environment, ensuring that everyone is protected from significant risks where they live, learn, work, and play. As part of this mission, the EPA enforces environmental statutes and regulations at approximately 40 million regulated public and private entities, such as wastewater treatment plants, pesticide manufacturers, and oil refineries. The environmental and health hazards posed by regulated entities not in compliance with environmental statutes and regulations can disproportionately impact low-income, minority, tribal, and indigenous communities.

The EPA implements enforcement programs for 12 federal environmental statutes. The EPA has authorized most states and some territories and tribes to implement many environmental programs and to directly enforce many environmental laws.<sup>2</sup> The EPA retains oversight responsibilities for

<sup>1</sup> EPA OIG, *EPA's Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018*, [20-P-0131](#), March 31, 2020.

<sup>2</sup> In this report, we use "state" or "states" to collectively refer to "states, territories, and tribes."

### Federal Environmental Statutes Administered by the EPA

- Act to Prevent Pollution from Ships.
- Clean Air Act.
- Clean Water Act.
- Comprehensive Environmental Response, Compensation, and Liability Act.
- Emergency Planning and Community Right-to-Know Act.
- Federal Insecticide, Fungicide, and Rodenticide Act.
- Marine Protection, Research, and Sanctuaries Act.
- National Environmental Policy Act.
- Oil Pollution Act.
- Resource Conservation and Recovery Act.
- Safe Drinking Water Act.
- Toxic Substances Control Act.

environmental and enforcement programs that states have the authority to implement. The EPA also retains independent enforcement authority in authorized states. If a state does not have enforcement authority from the EPA, the Agency directly implements the enforcement program for that state. The EPA's Office of Enforcement and Compliance Assurance, or OECA, is responsible for the Agency's enforcement program.

According to the *FY 2018–2022 U.S. EPA Strategic Plan*:

A robust enforcement program is critically important for addressing violations and promoting deterrence, and supports the Agency's mission of protecting human health and the environment. Ensuring compliance with the law also ensures consistency and certainty for the regulated community so it has a complete understanding of the impact of proposed actions on human health, the environment, and the economy, and a clear path and timeline to achieve that compliance.<sup>3</sup>

### ***Performance Measures Help EPA Track and Demonstrate Progress Made in Its Enforcement Program***

Ensuring compliance with environmental laws and regulations is critical to accomplishing the EPA's mission of protecting human health and the environment. The EPA uses performance measures to assess, track, and demonstrate its progress toward ensuring consistency and certainty for the regulated community.

Environmental enforcement involves a complicated process and numerous players, with government agencies, regulated entities, and the public working toward compliance with environmental laws and regulations. The process often begins with providing compliance assistance and may involve enforcement actions that result in human health and environmental benefits. We simplified this process to the key steps in Figure 1.

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<sup>3</sup> EPA, *FY 2018–2022 U.S. EPA Strategic Plan*, [EPA-190-R-18-003](#), February 2018 (updated September 2019).

**Figure 1: The enforcement process includes compliance assistance, compliance monitoring activities, enforcement actions, monetary outcomes, and environmental benefit outcomes**



Source: OIG summary of EPA information. (EPA OIG image)

At the beginning of the enforcement process, the EPA or states may provide **compliance assistance** to regulated entities to help them comply with environmental laws and regulations. Examples of compliance assistance include EPA-provided training to a regulated industry about regulatory requirements and “ask-the-expert” or technical assistance provided over the phone or through online compliance assistance centers geared toward specific regulated industry groups.

### Enforcement Outputs

**Compliance assistance** provided by the EPA or states, such as training or technical assistance, helps regulated entities comply with environmental laws and regulations.

**Compliance monitoring activities**, such as inspections, assess a regulated entity's compliance with environmental laws and regulations.

**Enforcement actions** refer to the informal or formal actions taken by the EPA, the Department of Justice, or an authorized state to address instances of noncompliance typically identified through inspection findings, tips, or self-reported violations. Informal enforcement actions generally include warning letters or notices of violation, while formal enforcement actions include administrative orders or judicial actions. Enforcement actions include the number of cases initiated and number of cases concluded.

The EPA and states conduct compliance monitoring activities, typically in the form of inspections, to assess a regulated entity's compliance with environmental laws and regulations. These activities may be planned as part of a routine activity or national enforcement priority or may be undertaken based on a tip that the EPA received.

When the EPA or a state discovers noncompliance at a facility through compliance monitoring or a regulated entity's self-disclosure,<sup>4</sup> it may initiate an informal enforcement action, which would give the facility the opportunity to return to compliance, or a formal enforcement action. Alternately, it may refer or defer the enforcement case to another regulatory entity. For example, if a state identifies noncompliance, it may refer the enforcement case to the EPA; this referral usually occurs when the nature of the facility or noncompliance is technically complex or when the state requests the Agency's assistance. However, a state may request that it be the lead on an enforcement action in which the EPA identified noncompliance. In such cases, the EPA may then defer action to the state.

On the federal level, the Agency may refer cases to the DOJ for judicial enforcement action.<sup>5</sup> The DOJ decides whether it will accept the enforcement case or send it back to the EPA. When the DOJ accepts a case, members of the EPA staff work with the DOJ to develop and conclude the enforcement action.

EPA or state enforcement actions or cases can result in a combination of **injunctive relief; penalties; supplemental environmental projects**, commonly referred to as SEPs; and **environmental benefits** (Figure 1).<sup>6</sup> These measures of enforcement outcomes are described in detail in the blue box on the next page. As an example, in a 2018 settlement, [MarkWest Energy Partners](#) agreed to:<sup>7</sup>

- Invest an estimated \$2.6 million to install and operate technologies to reduce its emissions of regulated pollutants at its facilities in two states.
- Pay a civil penalty of \$610,000.

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<sup>4</sup> The EPA's eDisclosure System, established in December 2015, encourages regulated entities to voluntarily discover, promptly disclose, expeditiously correct, and act to prevent the recurrence of environmental violations. For more information, see the EPA's eDisclosure [website](#).

<sup>5</sup> Many environmental statutes specify that certain enforcement actions must be addressed judicially, for example, large penalty cases under the Clean Water Act.

<sup>6</sup> On March 12, 2020, the DOJ directed its attorneys to not include SEPs in EPA judicial settlements. See DOJ, Memorandum to Environment and Natural Resources Division deputy assistant attorney generals and section chiefs, from Assistant Attorney General Jeffrey Bossert Clark, Subject: *Supplemental Environmental Projects ("SEPs") in Civil Settlements with Private Defendants*, dated March 12, 2020. As of March 18, 2020, the EPA no longer used SEPs in most of its civil administrative enforcement cases. On February 4, 2021, the DOJ withdrew this memorandum.

<sup>7</sup> Throughout this report, we provide weblinks to EPA enforcement case summaries for the convenience of readers who would like to learn more about these cases. The enforcement results reported in some of these case summaries vary from those that we calculated from the data we retrieved from OECA's internal Federal Enforcement and Compliance Dashboard because we adjusted all monetary enforcement results to 2018 U.S. dollar.

- Complete SEPs valued at \$2.4 million that included running a community project for emissions monitoring among other projects.

The EPA also estimated that the corrective actions MarkWest Energy Partners completed would reduce emissions by more than 1.4 million pounds of volatile organic compounds per year.

Ultimately, the long-term outcomes of the enforcement action and results are to return the facility to compliance, to deter future noncompliance, and to achieve benefits to human health and the environment.

## Enforcement Outcomes

**Injunctive relief**, which is measured in U.S. dollars, refers to the actions a regulated entity must perform or refrain from performing as a result of the conclusion of an enforcement action. Injunctive relief generally aims to bring the regulated entity into compliance with applicable environmental laws and regulations, and to remedy any harm from the alleged violations.

**Penalties**, which are measured in U.S. dollars, represent the monetary assessments a violator pays to the U.S. Treasury in connection with the violator's noncompliance with regulatory or statutory requirements. Environmental laws, regulations, and EPA policies establish the criteria for penalty amounts. Criteria affecting penalty amounts may include, among others, the severity and duration of the noncompliance, the size of the regulated entity, the entity's history of violations, the entity's level of culpability, and the degree to which the entity derived an economic benefit from noncompliance.

**Supplemental environmental projects**, which are measured in U.S. dollars, are projects that a regulated entity voluntarily agrees to complete as part of a concluded enforcement action or settlement. SEPs are expected to produce environmental and public health benefits beyond those required by law and regulation.

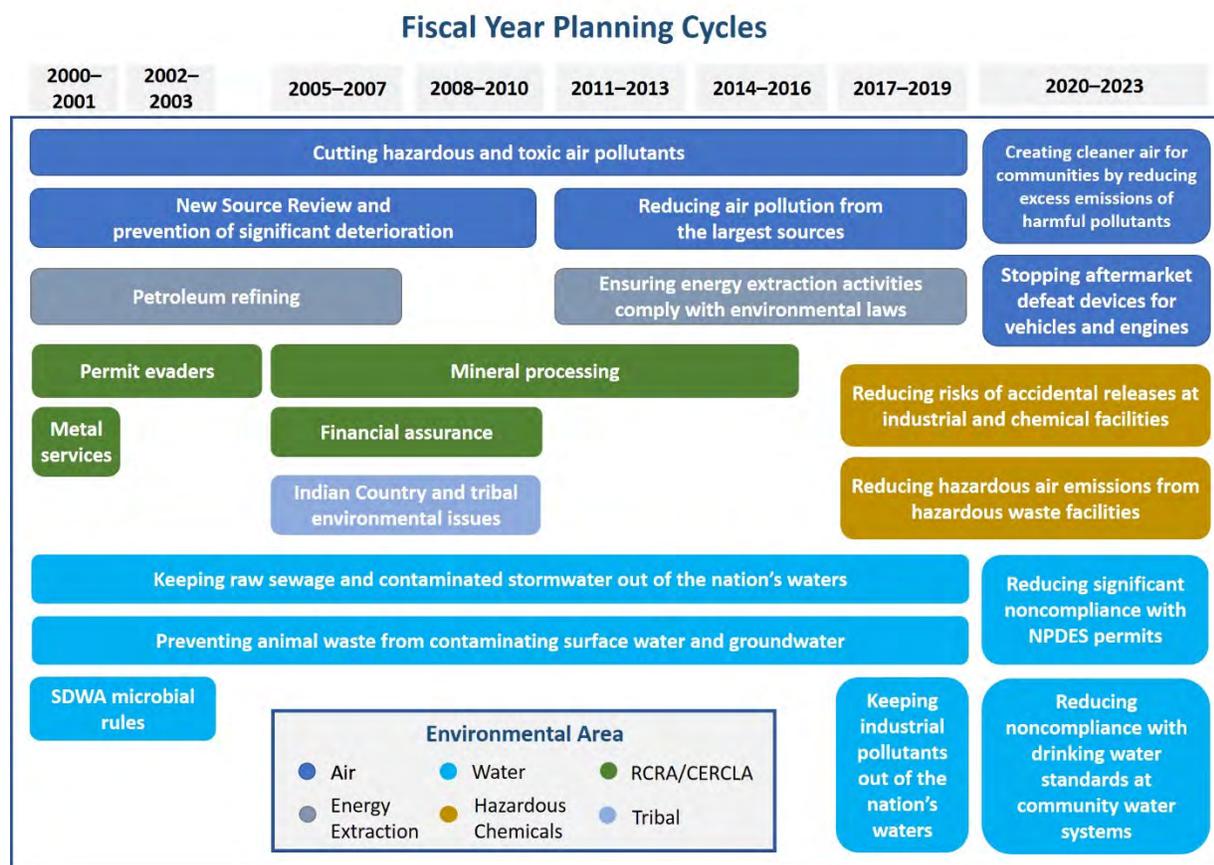
**Environmental benefits**, which are principally measured in pounds or cubic yards, refer to the estimated environmental improvements to be achieved if all terms of the concluded enforcement action are met. The EPA tracks and reports several types of environmental benefits, including (1) reduction, treatment, or elimination of pollutants (in pounds); (2) cleanup of contaminated soil and water (in cubic yards); and (3) treatment, minimization, or proper disposal of hazardous and nonhazardous waste (in pounds).

Depending on the severity of the violation and whether the violation was willfully or knowingly committed, the EPA, through the DOJ, may also pursue criminal charges against an individual or corporate defendant in addition to civil enforcement actions. This report does not analyze trends in the Agency's criminal or state enforcement results.

## EPA Sets National Priorities for Its Enforcement Activities

Every two to four years, the EPA sets **national enforcement priorities** to focus civil and criminal enforcement resources and expertise on serious environmental problems.<sup>8</sup> After setting these national priorities, the EPA’s OECA and the EPA regions discuss region-specific enforcement commitments to support the goals and measures of those priorities. Depending on the level of progress, the EPA may either carry over a national priority to the next cycle or consider the issue sufficiently addressed and return the issue to the “core” enforcement program. The EPA’s national enforcement priorities have previously focused on addressing substantial pollution problems, such as those occurring in the mineral-processing or petroleum-refining industries, or particular types of pollutants, such as air toxics or stormwater pollutants (Figure 2). The Agency’s national priorities for FYs 2020 through 2023 focus on areas of noncompliance within the air, hazardous chemicals, clean water, and safe drinking water programs.

**Figure 2: Timeline of the EPA’s national enforcement priorities, FYs 2000 through 2023**



Source: OIG summary of the EPA’s national enforcement priorities. (EPA OIG image)

<sup>8</sup> In August 2018, the Agency renamed the priorities from **national enforcement initiatives** to **national compliance initiatives** to emphasize the overall goal of increased compliance using the full range of compliance assurance tools. This report uses **national enforcement priorities** to collectively refer to the Agency’s national enforcement and compliance initiatives over time.

## ***EPA Enforcement Is Vital for Maintaining and Advancing Environmental Justice***

In 1994, President Bill Clinton signed Executive Order 12898, requiring each federal agency to:

[M]ake achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

Across the country, many low-income and minority communities are overburdened with high levels of environmental pollution and other adverse societal and economic conditions. Therefore, detecting and deterring environmental noncompliance is important to maintaining and advancing environmental justice. EPA regions and OECA target facilities located in these communities for compliance monitoring activities. In July 2020, the EPA OIG identified integrating and leading environmental justice across the Agency and government as a top management challenge for the EPA.

## ***EPA Tracks and Publicly Reports Annual Enforcement Measures and Results***

Each fiscal year, the EPA tracks and publishes its annual enforcement measures and results on its [website](#). Prior to posting this information, the ten EPA regions and EPA headquarters verify and submit data to OECA about their enforcement activities, actions, and results. The website details the enforcement program overall, annual monetary and environmental results, and year-to-year enforcement trends for the previous ten years. The website also highlights specific accomplishments, such as cases that resulted in large monetary enforcement results or significant environmental benefits. For example, the EPA highlighted a landmark Clean Air Act enforcement action against [Volkswagen](#) in the Agency's FY 2016 annual enforcement measures. Adjusted for inflation to 2018 USD, the case resulted in \$17.8 billion in penalties and injunctive relief, among other actions.

The sequential nature of many enforcement cases means that there is an inherent lag in demonstrating results. A decline in compliance monitoring activities subsequently leads to a decline in case initiations and conclusions. Thus, the number of compliance monitoring activities is a leading indicator of the EPA's enforcement efforts, whereas monetary and environmental outcomes are lagging indicators.

## Noteworthy Achievements

Since 2011, OECA has developed and improved an internal dashboard that allows EPA managers and staff to track trends in compliance monitoring activities, initiated and concluded enforcement actions, results from those enforcement actions, and environmental benefits. In February 2018, OECA Assistant Administrator Susan Bodine announced the availability of the newest version of the dashboard to Agency staff. The internal dashboard displays real-time information from OECA's Integrated Compliance Information System. The dashboard has a user interface that allows personnel to customize their searches and download the resulting data. Assistant Administrator Bodine indicated that the dashboard could serve as a valuable management tool by providing enforcement managers and staff with quick access to the latest enforcement data. In addition, managers can use the dashboard to view the enforcement data by region, program, or fiscal year to assist with program management.

In February 2013, the EPA released similar dashboards and comparative maps for EPA and state enforcement activities within the air, drinking water, hazardous waste, pesticide, and water programs. These dashboards and maps are available to the public on the Enforcement Compliance History Online [website](#). The state dashboards allow the public to quickly look at key environmental compliance and enforcement measures, such as compliance monitoring activities and enforcement actions, by state.

## Responsible Office

OECA works with the EPA's ten regional offices, states, and other federal agencies to ensure that federal environmental laws and regulations are enforced fairly and effectively. OECA is responsible for setting the Agency's enforcement priorities, tracking enforcement results, and reporting those results to the public.

## Scope and Methodology

We performed our work from November 2018 to February 2021. We conducted this performance audit 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.

To identify national, regional, and statute-specific trends in federal enforcement measures, we analyzed EPA annual enforcement data from FYs 2006 through 2018 from OECA's internal Federal Enforcement and Compliance Dashboard. Data pulled on one date may differ from data pulled on a later date and may yield different analytic results because the data in the dashboard are updated daily.

However, by comparing data pulled at different times during this audit, we determined that these minimal differences did not impact the overall results of our trend analyses. We obtained data related to FYs 2006 through 2018 from December 20, 2018, through April 4, 2019. To ensure that the findings in this report are accurate, we conducted a data-reliability assessment in accordance with generally accepted government auditing standards; we determined that the EPA enforcement data are sufficiently reliable. We did not examine informal, criminal, or state-led enforcement actions.

To better understand the observed trends and to identify key factors that contributed to those trends, we interviewed the three assistant administrators for Enforcement and Compliance Assurance who served from FYs 2006 through 2018 and managers of OECA divisions and of enforcement divisions in Regions 1, 4, 7, and 9, which we selected based on the geographic location and size of their programs. We also interviewed nongovernmental organization and academic experts about their observations and insights into environmental enforcement in general and EPA enforcement specifically. In addition, we analyzed Agency funding and staffing data to evaluate the potential impact of resources on enforcement trends; we did not independently verify the EPA's internal funding and staffing data.

Throughout this report, we provide weblinks to EPA enforcement case summaries for the convenience of readers who would like to learn more about these cases. The enforcement results reported in some of these case summaries vary from those that we calculated from the data we retrieved from OECA's internal Federal Enforcement and Compliance Dashboard because we adjusted all monetary enforcement results to 2018 USD.

We administered a survey to 2,462 members of the enforcement staff and managers in September 2019 to gather input on the key factors that affected enforcement trends over time. The survey solicited staff perceptions on:

- Inspections.
- Case initiations and conclusions.
- Enforcement results.
- Data quality.
- Data systems.
- Integrity of the enforcement program.

We received responses from 37 percent of the enforcement staff and managers that received the survey (911 responses). Appendix A includes additional information about the survey instrument, as well as analyses of all survey responses.

### ***Exclusion of FY 2006 Enforcement Activities and Results***

In our initial analysis, we determined that FY 2006 was a unique year because the EPA concluded more enforcement actions that year than any other year in the Agency's history, as shown in Figure 3. These actions primarily resulted from a national priority to focus enforcement efforts on air emissions from concentrated animal feeding operations. Concluded concentrated animal feeding operation cases represented 42 percent of the total number of cases that the EPA concluded in FY 2006, whereas these types of cases represented less than 1 percent of the total number of concluded cases in the 12 other years included in our period of analysis. We determined that including FY 2006 data in our trend analyses exaggerated the overall decline in enforcement activities and results. As a result, we excluded that year's enforcement activities and results from our trend analyses.

### ***Inclusion of FYs 2019 and 2020 Enforcement Activities and Results***

We included limited analyses of the FYs 2019 and 2020 activities and results, even though these were outside our audit objective.

We expanded our analyses to include FY 2019 after OECA released its annual enforcement measures on February 13, 2020. We pulled activities and results related to FY 2019 from the EPA's internal dashboard from February 24, 2020, through March 10, 2020. While we considered these data and provide a summary of how they fit into overall trends in Chapter 2 and Appendices B and C, we did not include FY 2019 data in our tables and figures for this report.

During OIG internal review of this draft report, OECA released its annual enforcement measures for FY 2020 on January 13, 2021. We pulled activities and results related to FY 2020 from the EPA's internal dashboard from January 26, 2021, through January 27, 2021. We compared these data to FY 2019 data in Appendix D but did not include FY 2020 data in our tables and figures for this report.

### ***Prior Reports***

In 2013, we reported on the EPA's enforcement trends from FYs 2006 through 2011.<sup>9</sup> We found that, while the number of concluded enforcement actions for FYs 2006 through 2011 remained relatively constant overall, the monetary results that EPA regions achieved from enforcement actions varied. The variations were explained by the timing and locations of a few large concluded cases. In any given year, the conclusion of one or a few large cases can result in unusually large monetary results. National enforcement priorities set by OECA drove most of these large cases. We made no recommendations to the EPA in that report.

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<sup>9</sup> EPA OIG, *Response to Congressional Request on EPA Enforcement*, [13-P-0168](#), February 28, 2013.

In January 2020, the U.S. Government Accountability Office reported that the EPA collects a range of information about compliance and enforcement efforts.<sup>10</sup> The GAO found that, while it collected data on formal enforcement activities, the EPA did not consistently collect data about compliance assistance and informal enforcement activities for its national databases. In addition, the GAO found that several of the EPA's FY 2018 enforcement-related reports did not disclose known limitations about the Agency's enforcement data. Without this information, readers of the EPA's annual reports were at risk of drawing inaccurate conclusions or information from the data. The GAO did not assess the reliability of the data but rather critiqued the Agency's inconsistency in stating the known limitations of the data in some FY 2018 enforcement-related reports. The GAO recommended that the EPA clarify for regions how the definition of informal enforcement actions should be used to collect data about these activities, to share the known limitations of data in its annual reports, and to provide information on the intended use of the EPA's data. The EPA agreed with all recommendations. As of April 5, 2021, the GAO considered these recommendations open.

In March 2020, we reported on national trends in the EPA's annual enforcement results.<sup>11</sup> We found that the EPA's annual level of compliance monitoring activities, enforcement actions, and enforcement results generally declined from FYs 2006 through 2018. While conducting this audit, the EPA released its FY 2019 annual enforcement measures and 11 of the 15 measures continued to decrease when compared to FY 2018. We also found that both the funding for the Agency's enforcement program and the number of enforcement staff decreased 18 and 21 percent, respectively, when comparing FYs 2006 and 2018; these resources continued to decrease in FY 2019. We made no recommendations to the EPA.

In December 2020, the GAO reported that the EPA had shifted the focus of its national priorities from enforcing environmental laws to promoting compliance with environmental laws.<sup>12</sup> The report noted that, as of September 2020, the EPA had not finalized its guidance to the regions and states for implementing the new national priorities, which went into effect October 2019. Furthermore, the GAO found that the EPA does not document the outcomes of its assessments of regional performance. Based on that finding, the GAO concluded the EPA could not demonstrate that its regional activities support its strategic objectives. The GAO recommended that the EPA:

- (1) Communicate final guidance to all states for future national priorities before the effective date.

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<sup>10</sup> GAO, *Environmental Protection: Additional Action Needed to Improve EPA Data on Informal Enforcement and Compliance Assistance Activities*, [GAO-20-95](#), January 31, 2020 (released March 2, 2020).

<sup>11</sup> EPA OIG, *EPA's Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018*, [20-P-0131](#), March 31, 2020.

<sup>12</sup> GAO, *Environmental Protection: Action Needed to Ensure EPA's Enforcement and Compliance Activities Support Its Strategic Goals*, [GAO-21-82](#), December 9, 2020.

- (2) Incorporate lessons learned from its initial efforts to engage with states when outlining future procedures for drafting national priorities.
- (3) Document the outcomes of the EPA's performance assessments at the regional level, including progress toward performance goals that support the EPA's strategic objectives.

The EPA agreed with all recommendations. As of April 5, 2021, the GAO considered these recommendations open.

## Chapter 2

### EPA's Key Annual Enforcement Results Declined Over Time Nationally, Regionally, and by Environmental Statute

National-level, regional-level, and statute-specific EPA compliance monitoring activities, enforcement actions, and most enforcement results, including output and some outcome measures, generally declined from FYs 2007 through 2018. The decline in compliance monitoring activities means that, over time, the Agency and the public had less knowledge about regulatory compliance and whether facilities were emitting pollutants that could be harmful to those living nearby. With the associated decline in enforcement actions with penalties or injunctive relief, the EPA may not be adequately addressing violators, who thereby gain an advantage over regulated entities that comply with the environmental regulations.

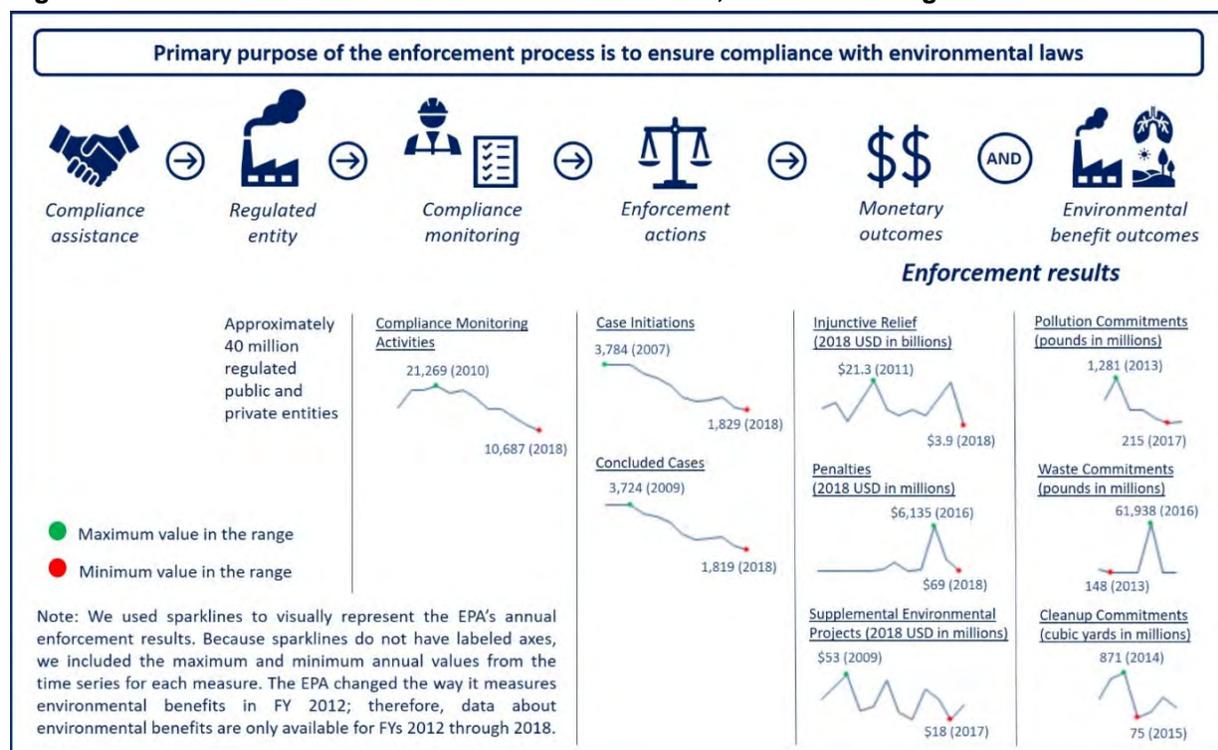


#### EPA's National Enforcement Results Declined from FYs 2007 Through 2018

Key national enforcement results, such as the numbers of compliance monitoring activities and concluded enforcement cases, the monetary value of SEPs, and the pounds of pollution reduction committed, declined over the period examined (Figure 3). In addition, the EPA concluded 58 percent fewer enforcement actions with injunctive relief, 53 percent fewer enforcement actions with penalties, and 48 percent fewer enforcement actions with SEPs in FY 2018 than in FY 2007. The conclusion of cases with large monetary or environmental commitments dominated the trends in specific measures, such as the amounts of injunctive relief, penalties, and waste and cleanup commitments. We reported the full details about the national trends in March 2020.<sup>13</sup>

<sup>13</sup> EPA OIG, *EPA's Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018*, [20-P-0131](#), March 31, 2020.

**Figure 3: EPA national enforcement measures over time, FYs 2007 through 2018**



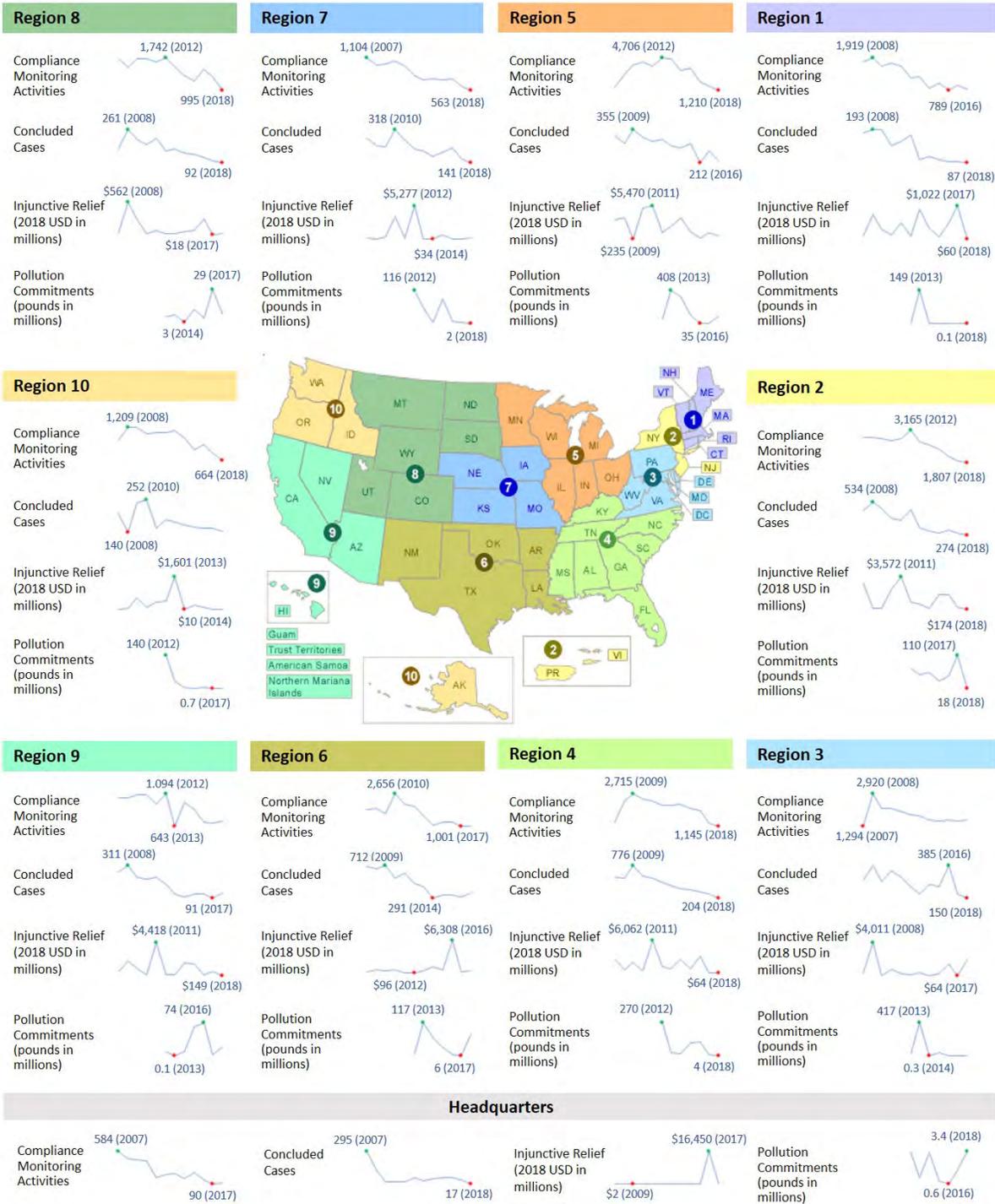
Source: OIG analysis of EPA annual enforcement data. (EPA OIG image)

## EPA's Enforcement Results Declined for Most EPA Regions from FYs 2007 Through 2018

From FYs 2007 through 2018, the trends in enforcement results by region generally followed the declining national trends for compliance monitoring activities, enforcement actions concluded, and enforcement results (Figure 4). We do not expect each region to produce comparable enforcement results, but nearly all regions and EPA headquarters reported decreases in the numbers of compliance monitoring activities and enforcement actions when comparing FYs 2007 and 2018. The one exception was Region 3, which reported a large one-year increase in the number of compliance monitoring activities followed by ten years of general decline. A few regions influenced the national trends in enforcement results more than other regions because of their large numbers of regulated entities and enforcement staff.

Region 5 conducted the most compliance monitoring activities and reported the largest amounts of injunctive relief and SEP dollars over the 12 years. Regions 4 and 6 concluded the most enforcement actions over the 12 years and accounted for nearly three-quarters of the total penalty dollars. Similarly, Regions 4 and 5 together accounted for almost half of the total pounds of pollutant commitments, and Region 4 alone accounted for three-quarters of the total pounds of waste commitments. We examine the trends in enforcement measures for each region in greater depth in Appendix B.

**Figure 4: Key enforcement measures over time for EPA regions, FYs 2007 through 2018**



Note: We used sparklines to visually represent the EPA's annual enforcement results. Because sparklines do not have labeled axes, we included the maximum and minimum annual values from the time series for each measure. The EPA changed the way it measures environmental benefits in FY 2012; therefore, data about environmental benefits, such as pollution commitments, are only available for FYs 2012 through 2018.

- Maximum value in the range
- Minimum value in the range

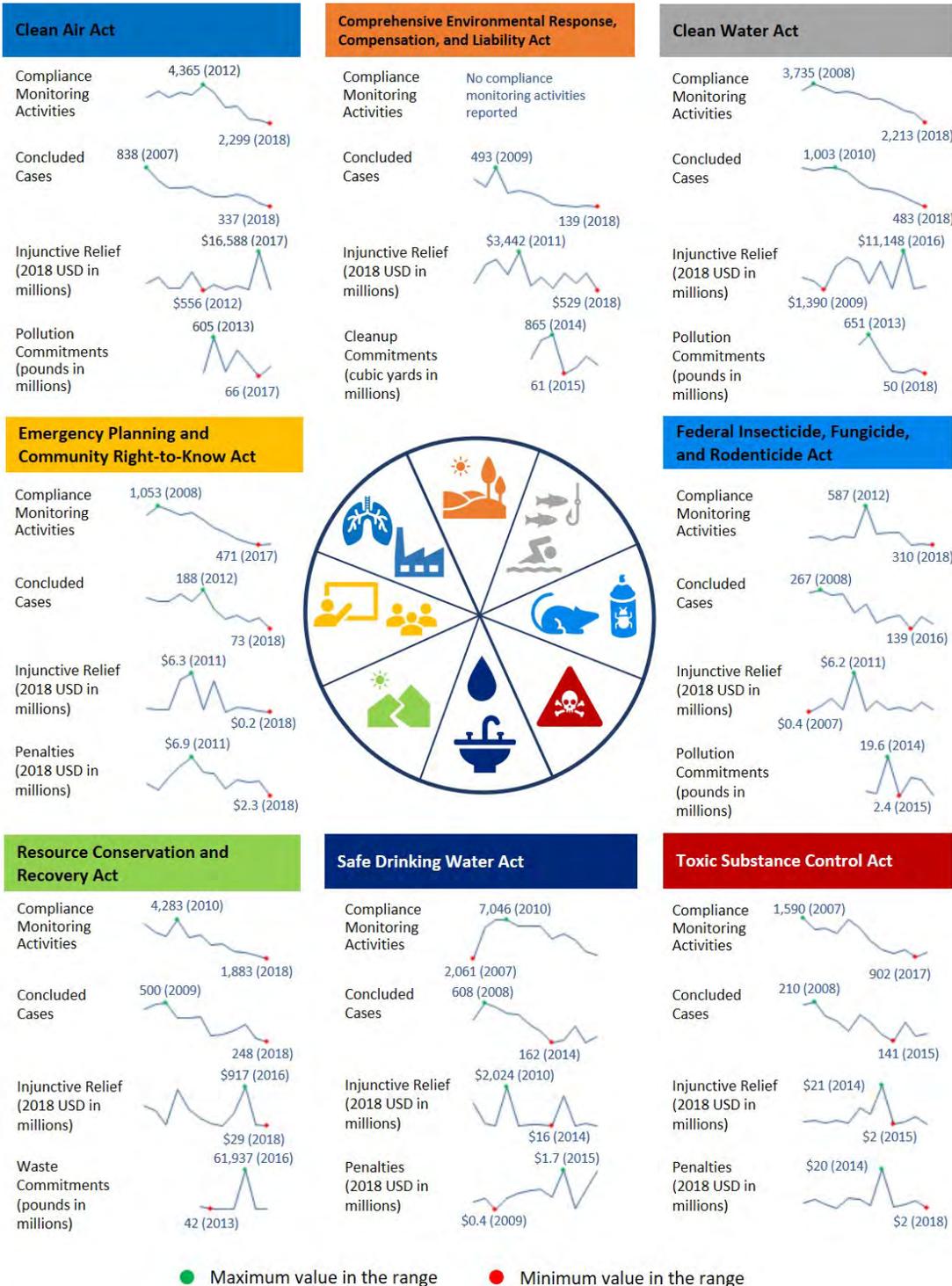
Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

## **EPA's Enforcement Results Generally Declined for Most Environmental Statutes from FYs 2007 Through 2018**

From FYs 2007 through 2018, the trends in enforcement results by environmental statute generally followed the declining national trends for compliance monitoring activities, enforcement actions concluded, and enforcement results (Figure 5). While we do not expect each statute to produce comparable enforcement results because the numbers of regulated entities and enforcement staff differ among statutes, a few statutes influenced the national trends in enforcement results and environmental benefits.

The Safe Drinking Water Act, or SDWA, and Clean Air Act, or CAA, accounted for the most compliance monitoring activities from FYs 2007 through 2018. The Clean Water Act, or CWA, and CAA accounted for the largest portion of enforcement actions concluded over time and together accounted for almost all penalty dollars and total pounds of pollutant reduction commitments. The CWA and CAA also represented 79 percent of the value from injunctive relief and 73 percent of the value from SEPs. Similarly, enforcement actions concluded under the Resource Conservation and Recovery Act, or RCRA, and the Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA, accounted for nearly all of the total pounds of waste cleanup commitments and the cubic yards from commitments to clean up contaminated soil or water, respectively. The conclusion of large enforcement actions influenced trends in penalties and injunctive relief within statutes. We examine these trends by statute in greater depth in Appendix C.

**Figure 5: Key enforcement measures over time for major environmental statutes, FYs 2007 through 2018**



Note: We used sparklines to visually represent the EPA’s annual enforcement results. Because sparklines do not have labeled axes, we included the maximum and minimum annual values from the time series for each measure. The EPA changed the way it measures environmental benefits for FY 2012; therefore, data about environmental benefits for pollution commitments, waste commitments, and cleanup commitments are only available for FYs 2012 through 2018.

Source: OIG analysis of EPA enforcement results. (EPA OIG image)

## Many Enforcement Measures Continued to Decrease in FYs 2019 and 2020

We conducted limited analyses of the FYs 2019 and 2020 enforcement results, even though these data were outside the scope of our objective (Appendix D). Compared to FY 2018, 11 out of 15 national enforcement measures continued to decline in FY 2019. Likewise, 11 of the 15 national enforcement measures declined in FY 2020, compared to FY 2019, although two of those declining measures were relatively stable and were less than a 3 percent decline.

Two enforcement measures that increased in FY 2019—penalties assessed and the value of injunctive relief—represent monetary results largely determined by the conclusion of particularly large enforcement actions:

- The EPA reported four times more value from penalties in FY 2019 compared to FY 2018; 73 percent of the FY 2019 total stemmed from an enforcement action against [Fiat Chrysler](#).
- Concluded enforcement actions resulted in 9 percent more injunctive relief dollars in FY 2019 compared to FY 2018; 43 percent of the FY 2019 total resulted from an enforcement action against the [City of New York](#).

In FY 2020, both penalties and injunctive relief reverted to the downward trend previously described, although the coronavirus pandemic likely affected the overall long-term downward trend of EPA enforcement activities in FY 2020.

Two measures associated with the environmental benefit to reduce, treat, and eliminate pollutants—the number of enforcement actions with this type of commitment and the total pounds of pollutant commitment—also increased in FY 2019 compared to FY 2018. The EPA concluded 3 percent more enforcement actions with a pollution commitment and the total pounds of pollution commitments increased 19 percent from FY 2018 to FY 2019. In FY 2020, both of these environmental benefit measures continued to increase.

All three environmental benefit outcome measures increased in FY 2020 compared to FY 2019. In FY 2020, the EPA reported:

- A 23-percent increase in the pounds of pollution commitments compared to FY 2019; 65 percent of the FY 2020 total resulted from an action against [Detroit Edison](#).
- Three hundred times more pounds of waste commitments compared to FY 2019; more than 99 percent of the FY 2020 total stemmed from an action against [Simplot Phosphates](#).

- Eight times more cubic yards of cleanup commitments compared to FY 2019; 94 percent of the FY 2020 total resulted from an action against [Foster Wheeler Energy Corporation](#).

As of the date of this report, it was too soon to tell whether the changes in FYs 2019 and 2020 measures represented changes in the overall trends we observed for FYs 2007 through 2018. After reviewing the Agency's recently released FY 2020 enforcement results, we found that two of the four measures that increased in FY 2019 relative to FY 2018—total injunctive relief and penalty dollars—decreased in FY 2020. OECA released its annual enforcement measures during the OIG's internal review of this report. We show FY 2019 and FY 2020 changes in Appendix D.

## Conclusion

From FYs 2007 through 2018, annual enforcement results tracked and reported by the EPA generally declined. Some measures experienced intermittent, unsustained increases with the conclusion of large enforcement actions. The declining trends occurred nationally, as well as by region and by environmental statute, and continued, for most national measures, into FYs 2019 and 2020. The decline in compliance monitoring activities meant that, over time, the Agency and the public had less knowledge about compliance by regulated entities and whether facilities emitted pollutants that could be harmful to people. The associated decline in enforcement actions that include penalties or injunctive relief could mean that the EPA is not adequately addressing violators, who thereby gain an advantage over other regulated entities that comply with environmental regulations. To better understand the overall declining trends in enforcement results, outputs, and outcomes, we also need to understand the key factors that contributed to these trends. We explain these key factors in the next chapter.

## **Chapter 3**

### **EPA's Decline in Enforcement Results Was Influenced by Resources, Leadership, and Culture**

A decline in funding for the EPA's enforcement program drove the observed declining enforcement trends. Congress appropriated 18 percent less funding for EPA enforcement in FY 2018 than in FY 2006 when comparing inflation-adjusted dollars. The resulting decline in the number of EPA enforcement personnel led to fewer compliance monitoring activities and concluded enforcement actions. In addition, leadership decisions affected the EPA's annual enforcement results through strategy, policy, and workforce culture changes. For example, leaders shaped national enforcement priorities and altered strategies to pursue enforcement cases related to what they perceived to be the most serious instances of noncompliance. Such strategies reduced the total number of enforcement outputs and targeted limited resources towards fewer high-value but resource-intensive cases. In 2017, EPA leadership also placed an increased emphasis on deference to state enforcement programs and on compliance assistance, which contributed to the decline in enforcement outputs.

As a result of the overall decline in the EPA's enforcement efforts, noncompliance with environmental laws and regulations may have gone undetected or unaddressed. Moreover, enforcement experts have shown the reduction in enforcement activity incentivizes industrial facilities to forego essential pollution control measures. As a result, facilities not adhering to requirements and not subject to enforcement actions might gain unfair advantages over their competition and expose the public and the environment to harmful pollutants.

#### **EPA's Declining Enforcement Funding Significantly Contributed to Decreases in Enforcement Results**

Congress appropriated less funding for EPA enforcement in FY 2018 than in FY 2006 when comparing inflation-adjusted dollars. Working with fewer resources was a significant factor leading to the decline in EPA enforcement results. Nonetheless, the EPA could identify and reduce gaps in its capacity to meet its enforcement-related strategic goals by undertaking required workforce planning.

##### ***EPA Congressionally Appropriated Resources Declined Over Time***

Total inflation-adjusted funding for the EPA as an Agency declined by 7 percent from FYs 2006 through 2018, from \$9.48 billion to \$8.82 billion, though there was some annual variation (Table 1). Funding for the EPA's enforcement program decreased 18 percent and the number of enforcement full-time

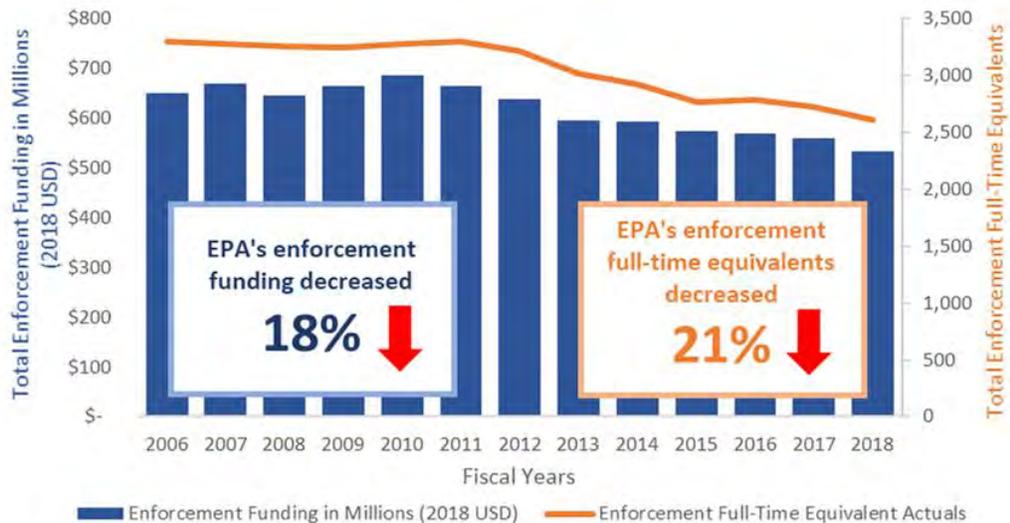
equivalents, or FTEs, decreased 21 percent from FYs 2006 through 2018 (Figure 6). Enforcement funding varied between 5.8 percent and 7.4 percent of total EPA funding over that time.

**Table 1: Total EPA and enforcement resources, FYs 2006 through 2018**

Fiscal year	Total EPA funding in billions (2018 USD)	Enforcement funding, in millions (2018 USD)	Enforcement allocation
2006	\$9.48	\$650	6.9%
2007	\$9.39	\$669	7.1%
2008	\$8.70	\$645	7.4%
2009	\$8.93	\$665	7.4%
2010	\$11.83	\$686	5.8%
2011	\$9.72	\$664	6.8%
2012	\$9.24	\$637	6.9%
2013	\$8.49	\$594	7.0%
2014	\$8.68	\$594	6.8%
2015	\$8.59	\$574	6.7%
2016	\$8.51	\$570	6.7%
2017	\$8.25	\$559	6.8%
2018	\$8.82	\$534	6.1%

Source: OIG analysis of the EPA's financial data. (EPA OIG table)

**Figure 6: Total EPA enforcement resources, FYs 2006 through 2018**



Source: OIG analysis of the EPA's financial and human resources data. (EPA OIG image)

Over the same time that the Agency's enforcement resources diminished, a growing domestic economy increased the size and level of activity of key sectors that the EPA regulated. Congress also delegated additional regulatory responsibilities to the EPA through laws such as the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act and the Energy Policy Act. A common theme among survey responses was that enforcement capacity declined to a point at which the EPA could not adequately cover the major inspection obligations. Since 2006, both oil and gas production and the number of oil and gas wells increased significantly, more than doubling U.S. petroleum production. Output

from farms and manufacturing also increased over that time. The increase of such high-impact economic activities exacerbated the risks of reduced compliance monitoring and enforcement activities. At a time when the need for EPA oversight and enforcement increased, the data indicate that the EPA’s capacity to meet that need decreased.

**Decline in Enforcement Resources Significantly Impacted EPA Enforcement Trends**



Data show that the decline in enforcement funding and the associated decrease in FTEs impacted the enforcement results from FYs 2007 through 2018. Enforcement personnel also reported that the Agency’s capacity to conduct work has declined. For example, 71 percent of survey respondents disagreed or strongly disagreed that there were enough employees to conduct facility inspections to identify noncompliance during FYs 2017 and 2018 (Figure 7).

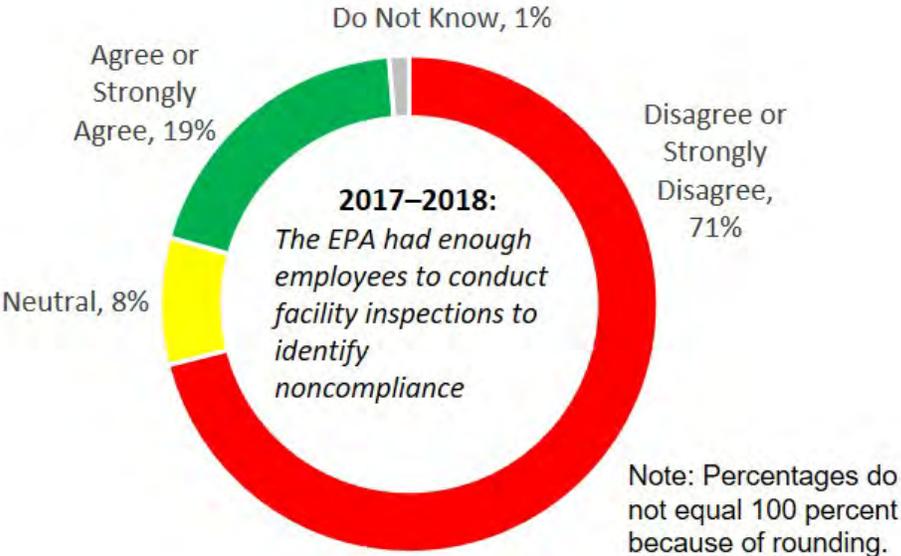
**2019 OIG Survey of EPA Enforcement Personnel:  
Impact of Resources on Inspections**

We received 186 survey comments about the availability of inspection resources. Respondents most frequently described the following:

- A reduced number of inspection resources had a negative impact on EPA compliance monitoring.
- EPA inspectors took on duties that were not related to inspections, which negatively affected their ability to conduct inspections.

We received 105 comments about the effectiveness of inspections, which generally focused on the relative ineffectiveness of the overall inspection scheme because of inadequate EPA capacity or field presence.

**Figure 7: EPA did not have enough employees to conduct inspections in 2017 and 2018 according to enforcement staff and managers**



Source: OIG analysis of EPA enforcement staff and manager responses to the 2019 OIG Enforcement Survey. (EPA OIG image)

We found that a declining workforce—the Agency lost 675 enforcement FTEs from FYs 2007 through 2018—forced many inspectors to take on additional duties, such as case development, which consumed time that they would have otherwise used to conduct inspections and other compliance monitoring activities. Moreover, EPA enforcement managers told us that many of the enforcement employees who departed had substantial institutional expertise that could not be replaced by the junior personnel who took on their roles, which resulted in a less-experienced workforce overall.



With fewer and less-experienced staff to initiate, develop, and conclude enforcement cases, along with other factors, such as the decline in compliance monitoring activities, the Agency has been unable to maintain consistent levels of enforcement actions. As the number of FTEs decreased from year to year, the number of concluded enforcement actions tended to decrease in a proportional manner. Because of the decline in resources and FTEs, the EPA cannot support as many serious national or regional cases at any given time. We were told in a meeting with OECA managers that, with fewer resources, settling cases tends to be a more attractive option than spending money on costly litigation. With fewer resources for enforcement, enforcement leadership members told us that the EPA limited the scope of some cases, which might preclude them from identifying and addressing the root causes of noncompliance.

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**2019 OIG Survey of EPA Enforcement Personnel:  
Case Follow-Up**

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We received 71 survey comments about the EPA following up on concluded enforcement cases to gauge whether a regulated party came back into compliance. Common themes most frequently described by respondents included:

- The Agency does not prioritize or reward enforcement personnel for their case follow-up activities despite it being a required part of their job, and
- A lack of resources, time, and personnel prevented case follow-up activities from being completed appropriately.

Decreased funding for the Agency and the enforcement program also impacted enforcement outputs, such as the numbers of case initiations and concluded enforcement actions, by constraining the funds available for enforcement support. The Agency uses enforcement support funds to acquire new monitoring technology, to fund travel for subject-matter experts, and to contract for services. According to Cynthia Giles, the assistant administrator for OECA from May 2009 through January 2017, these support funds are crucial for developing the evidence needed in significant cases because the funds help the EPA to build strong cases supported by substantial evidence through sampling and other methods. Giles told us that OECA aggressively reduced the number of enforcement FTEs in order to retain flexibility with support funds. Based on our survey results, these efforts to retain support-fund flexibility did not continue, as only 28 percent of survey respondents felt there were sufficient inspection-support funds during FYs 2017 and 2018, down from 44 percent during FYs 2009 through 2016 and 56 percent during FYs 2006 through 2008.

## ***Undertaking Required Workforce Planning Would Help EPA Optimize Its Enforcement Resources***

### **Benefits of Workforce Planning**

According to the U.S. Office of Personnel Management, workforce planning helps federal agencies:

- Align workforce requirements to agency plans.
- Conduct a gap analysis.
- Identify and implement gap-reduction strategies.
- Optimize the structure and deployment of the workforce.
- Identify and overcome barriers to accomplishing goals.

Workforce plans help establish staffing and activity priorities so that federal agencies can operate efficiently toward meeting their goals. In August 2020, we reported that the EPA had not met the workforce planning requirements set forth by the Office of Personnel Management in its Human Capital Framework.<sup>14</sup> This framework requires an agency to:

- (1) Plan for and manage current and future workforce needs;
- (2) Design, develop, and implement proven strategies and techniques and practices to attract, hire, develop, and retain talent; and
- (3) Make progress toward closing any knowledge, skill, and competency gaps throughout the agency.<sup>15</sup>

Further, each agency must plan and implement its human capital policies and programs “based on comprehensive workforce planning and analysis” and manage skill gaps in “mission-critical occupations” by using “comprehensive data analytic methods and gap closure strategies.”<sup>16</sup> In our August 2020 report, we found that the EPA’s program offices had not conducted a systematic workload analysis or identified workforce needs for budget justification purposes since 1987. Meeting the workforce planning requirement would allow OECA to identify and reduce gaps in its capacity to implement its statutory enforcement responsibilities. In doing so, workforce planning would help the Agency overcome resource barriers and optimize its organizational structure and personnel deployment to accomplish its goals.

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<sup>14</sup> EPA OIG, *Lack of Planning Risks EPA’s Ability to Meet Toxic Substances Control Act Deadlines*, [20-P-0247](#), August 17, 2020.

<sup>15</sup> 5 C.F.R. § 250.203(b).

<sup>16</sup> 5 C.F.R. §§ 250.204(a)(2)–(3).

## EPA Shifted Its Operational Strategy to Focus on Biggest Polluters and Increased Emphasis on Compliance Assistance



Given limited resources and a shrinking number of personnel after FY 2011 (Figure 6), EPA staff, managers, and officials made strategic choices regarding the types of noncompliance to monitor and the types of enforcement cases to pursue. For example, we found that a strategic shift, which began during the mid-2000s and continued through 2018, refocused Agency enforcement resources on bigger cases against the most serious violators that significantly impacted human health and the environment.

In 2017, the Agency implemented another strategic shift that emphasized returning violators to compliance, rather than bringing enforcement actions that resulted in monetary penalties. Each of these strategies influenced enforcement trends, with the emphases on bigger enforcement cases and compliance assistance both leading to fewer formal enforcement actions initiated and concluded. The focus on bigger cases and the move away from pursuing small cases resulted in higher median enforcement outcomes, such as penalties and injunctive relief. However, when facility operators recognize that the EPA is conducting fewer compliance monitoring activities and enforcement actions in their geographic areas or industry sectors, they may risk noncompliance under the assumption that they are unlikely to become subject to EPA enforcement actions.

### ***Trend in EPA’s Typical Case Size Reflects Leadership Choices***

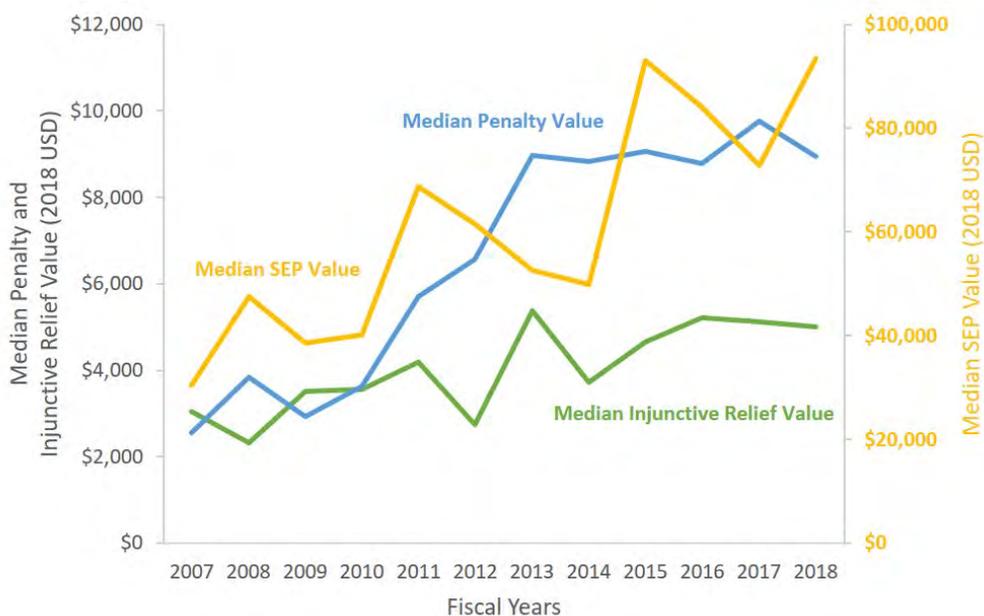
EPA staff, managers, and officials told us that the Agency’s strategy was to focus its limited enforcement resources on the most significant cases that have high impacts on human health and the environment. The result of this strategy shows in data for the monetary results from enforcement actions. Because the Agency calculates penalties for any given case partially based on those impacts, the median case size is one way to gauge the impact of focusing on bigger cases. Over time, the annual median inflation-adjusted injunctive relief, penalty, and SEP values all increased (Table 2 and Figure 8).

**Table 2: Change in median outcomes for EPA-concluded enforcement actions, FYs 2007 and 2018**

	Median value, FY 2007 (2018 USD)	Median value, FY 2018 (2018 USD)	Percent change
<b>Injunctive relief</b>	\$3,040	\$5,000	↑ 64%
<b>Penalties</b>	\$2,556	\$8,949	↑ 250%
<b>SEPs</b>	\$30,400	\$93,443	↑ 207%

Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG table)

**Figure 8: Annual median U.S. dollar value of EPA-concluded enforcement actions**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

Our analysis of the annual enforcement data indicates that the Agency increased the median case size primarily by decreasing resource investment in pursuing small cases (Table 3). Proportionally, the number of small-dollar concluded enforcement actions declined more dramatically than other cases. We did not independently assess the tradeoffs of the Agency’s strategy, and OECA managers were unaware of any internal EPA assessments of that nature.

**Table 3: Number of EPA-concluded enforcement actions by case size**

	Case size (2018 USD)	Number of cases in FY 2007	Number of cases in FY 2018	Net change from FYs 2007 through 2018 in number of cases	Percent change from FYs 2007 through 2018 in number of cases
Injunctive relief	\$1,000 or less	1,078	325	-753	↓ 70%
	More than \$1,000	1,854	920	-934	↓ 50%
Penalties	\$1,000 or less	780	198	-582	↓ 75%
	More than \$1,000	1,520	891	-629	↓ 41%

Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG table)

The strategy of pursuing cases with higher anticipated outcomes affects the entire enforcement process, including compliance monitoring activities. The reason for this is that those cases are more likely to require more complex inspections, which require more time and resources to complete and analyze. As a result, while compliance monitoring activity numbers are valuable data points, they do not accurately demonstrate the level of EPA effort because they do not include information about the complexity of the activities. According to former Assistant Administrator Giles, the EPA intends some inspections to demonstrate a field

presence and to serve as deterrents to noncompliance. The impact of inspections as deterrents is difficult to measure. Former Assistant Administrator Giles noted that inspections intended to investigate suspected violations are resource-intensive. Assuming equal resources, increasing the resource-intensive inspections to investigate noncompliance decreases the EPA’s ability to maintain a general field presence and lowers the annual outputs of compliance monitoring activities conducted and cases initiated and concluded. The EPA’s annual reporting does not capture this shift in inspections because the EPA reports all inspections equally, regardless of the resource intensity needed to conduct the inspection (Figure 9). For example, a complex inspection that takes several staff members weeks to complete counts as one inspection, while a walk-through inspection that takes less than half a day also counts as one inspection.

**Figure 9: Spectrum of complexity at EPA compliance monitoring activities**



Source: OIG summary of EPA information. (EPA OIG image)

The *FY 2014–2018 EPA Strategic Plan* noted that a “commitment to the largest most complex cases that have the biggest impact necessarily means that we will be doing fewer cases overall.” The decline in enforcement outputs—compliance monitoring activities and enforcement actions initiated and concluded—from FYs 2007 through 2018 is consistent with the strategy of pursuing cases with higher outcomes because of tradeoffs between total outputs and total outcomes. The annual outcome data, however, vary partly based on factors external to the Agency. Some of the largest enforcement cases, which have an outsized impact on annual enforcement outcomes, resulted from compliance monitoring activities based on tips or environmental disasters. Bigger cases tend to take longer to conclude and nearly always require referrals to the DOJ. The length of time to conclude these large cases contributes to the annual variability in enforcement outcomes like penalties and injunctive relief.

### ***Focus on Compliance Assistance Impacts Enforcement Outputs and Outcomes***

Beginning in 2017, Agency strategy and policy documents indicate that the administration adjusted the enforcement strategy to prioritize compliance over enforcement. For example, the Agency’s *FY 2018–2022 Strategic Plan* states that

“[t]he overall goal of EPA’s civil enforcement program is to maximize compliance with the nation’s environmental laws and regulations to protect human health and the environment.” OECA officials affirmed this framing, noting that the administration that began in 2017 recognized compliance assistance as an important tool and that it was acceptable in some cases to return a facility back into compliance without a formal enforcement action. Susan Bodine, the assistant administrator for OECA from December 2017 through January 2021, told us that the EPA’s annual reporting on enforcement outputs and outcomes fails to tell the whole story. While the EPA’s use of compliance assistance may not result in formal enforcement cases, in the former assistant administrator’s opinion, it still achieves the goal of environmental compliance. However, because the Agency does not measure compliance, the EPA has no data to show whether this strategy improves compliance. We discuss this further in Chapter 4.

The EPA’s strategic change toward increased compliance assistance instead of formal enforcement is unlikely to improve compliance with environmental laws on its own. Three primary factors affect a facility’s incentive to comply with the law: the expected benefits from noncompliance, the probability that noncompliance will be discovered, and the financial and reputational repercussions if caught not complying. If the expected benefits of noncompliance outweigh the expected costs, a facility has less incentive to comply with the law.

The EPA and outside enforcement experts have previously concluded that environmental enforcement achieves deterrence of noncompliance through formal actions that carry monetary sanctions. The EPA’s 1984 *Policy on Civil Penalties* affirmed that:<sup>17</sup>

Successful deterrence is important because it provides the best protection for the environment.... If a penalty is to achieve deterrence, both the violator and the general public must be convinced that the penalty places the violator in a worse position than those who have complied in a timely fashion .... [P]enalties generally should, at a minimum, remove any significant economic benefits resulting from failure to comply with the law.

As such, the EPA’s choice of enforcement tool—compliance assistance or formal enforcement—has important implications for meeting the EPA’s strategic goal of maximizing compliance. Absent the robust use of formal enforcement, which leads to the financial costs that help to deter noncompliance, compliance assistance is unlikely to incentivize facilities to comply with environmental laws.

Our analysis demonstrated that the national number of EPA enforcement actions with monetary enforcement results declined from FYs 2007 through 2018 (Figure 3). Enforcement experts suggest that, as monetary enforcement results decline, the cost of noncompliance decreases. In addition, the decline in the

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<sup>17</sup> EPA, [General Enforcement Policy #GM-21](#), *Policy on Civil Penalties*, dated February 16, 1984.

number of EPA compliance monitoring activities decreased the probability of the Agency identifying noncompliance. Therefore, a given facility’s incentive to comply with environmental laws also declined, which poses a risk for human health and the environment.

## Leadership Shapes Discretionary Policies That Directly and Indirectly Affect Enforcement Trends

Leadership affected trends in enforcement outputs and outcomes by shaping related policies and strategies. Policies and strategies implemented by leaders also influenced how enforcement staff perceived leaders’ support for the enforcement program. In turn, the staff’s perceived support from leadership influenced the staff’s interpretations of policies and strategies. As a result, strategy and policy affected enforcement trends both directly and indirectly.

For example, in 2008, Granta Nakayama, the assistant administrator for OECA, redirected the EPA’s policy regarding New Source Review cases under the CAA.<sup>18</sup> That policy change allowed staff to directly initiate major cases and signaled to EPA personnel

and the regulated community that the Agency would be aggressive toward major air polluters. Conversely, in a 2017 memorandum to EPA regional administrators, the EPA administrator narrowed the scope of New Source Review violations for which the Agency would pursue enforcement actions.<sup>19</sup> When asked about how policies shape enforcement trends, former

Assistant Administrator Giles specifically highlighted this 2017 memorandum, saying she believed the 2017 memorandum undermined New Source Review enforcement and reversed the EPA’s prior position. The redirection of policy in 2008 and the subsequent change in 2017 are examples of how leadership direction shapes the types of cases that the Agency brings. Giles also explained that enforcement policies that constrain enforcement can seem benign to the public but can nevertheless have profound impacts.

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### 2019 OIG Survey of EPA Enforcement Personnel: Case Development

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We received 177 survey comments about the development of enforcement cases. Key themes described by respondents included:

- Agency policies slowed or made case development more difficult to accomplish.
- Enforcement against certain industries or sectors was discouraged by regional or OECA senior leadership.
- A lack of resources or trained personnel slowed case development.

We received 214 survey comments about the 60-day inspection report timeliness standard. The key theme from these comments was that this requirement inhibits inspectors’ abilities to write in-depth reports, particularly for complex inspections.

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<sup>18</sup> New Source Review requires stationary sources of air pollution, such as factories, industrial boilers, and power plants, to obtain permits before construction starts.

<sup>19</sup> EPA, [Memorandum](#) to EPA regional administrators, from EPA Administrator E. Scott Pruitt, Subject: *New Source Review Preconstruction Permitting Requirements: Enforceability and Use of the Actual-to-Projected-Actual Applicability Test in Determining Major Modification Ability*, dated December 7, 2017.

In addition to such direct impacts on enforcement programs, some policies indirectly influenced trends in environmental enforcement. Since 2017, two new enforcement policies required more approvals from EPA officials during the enforcement process. One policy, which the EPA issued in 2018 and revoked in 2021, required case teams to alert their regional administrators before referring matters to the DOJ.<sup>20</sup> According to this procedure, the appropriate regional enforcement manager was to brief the assistant administrator of OECA with the case details and the regional administrator's personal position on the matter. Even though referrals to the DOJ make up just 5 to 8 percent of the total EPA case initiations in any given year, the referrals to the DOJ are an important indicator of future enforcement results because they can result in enforcement actions with high-penalty assessments, large amounts of injunctive relief, and significant environmental benefits. The second policy, which the Agency superseded after 18 months, mandated review by OECA management before EPA staff issued information requests under the CAA, the CWA, and RCRA.<sup>21</sup> Some staff interpreted these approval policies to mean that these actions were to be used less frequently.

Another example of how policies affect enforcement trends is a 2018 OECA memorandum that established a standard for inspection reports to be completed within 60 days of the inspection.<sup>22</sup> Respondents to our survey raised three primary issues with the new requirement. They stated that:

- The allotted time does not always allow inspectors to gather all information and fully document complex inspections.
- Some inspections are constrained geographically or seasonally, which lends itself to clustered inspections over several months in the field, followed by several months of inspection write-ups during the off-season. The new 60-day requirement does not accommodate this practice.
- Because of time constraints, the policy incentivizes inspectors to choose routine inspections over complex, process-based inspections.

Sixty-one percent of survey respondents did not think the timeliness standard allowed enough time for adequate documentation of inspection findings involving complex facilities or complex legal requirements (see Figure A-13 in

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<sup>20</sup> EPA, [Memorandum](#) to EPA regional counsel and enforcement managers, from Assistant Administrator for OECA Susan Parker Bodine, Subject: *Interim Procedures for Providing Early Notice of Civil Judicial Referrals*, dated March 23, 2018.

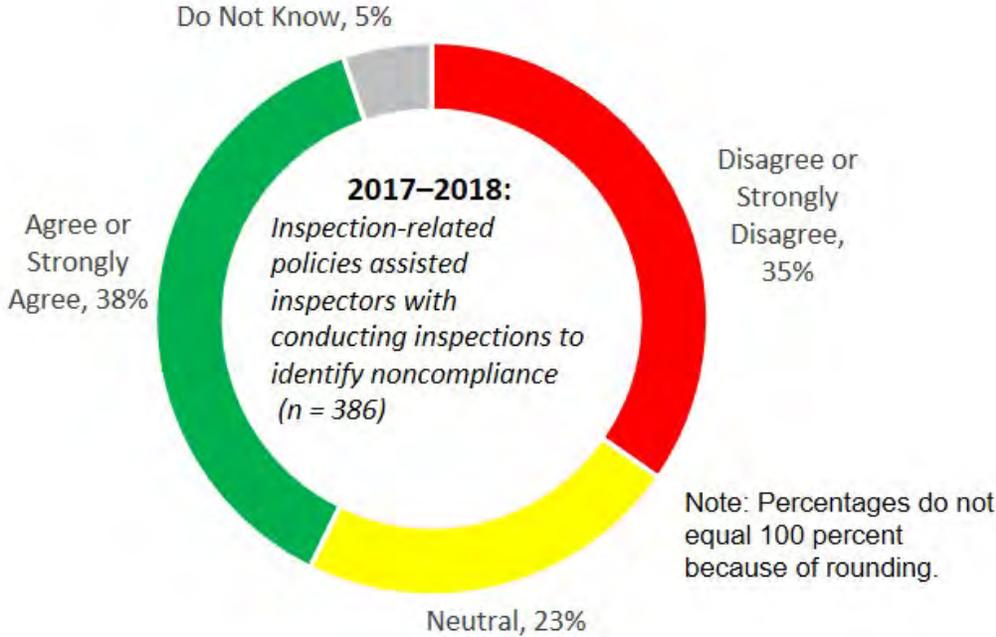
<sup>21</sup> EPA, Memorandum to EPA regional counsel and enforcement managers, from Director for Office of Civil Enforcement Susan Shinkman, Subject: *Interim Procedures for Issuing Information Requests Pursuant to Clean Air Act § 114, Clean Water Act § 308, and RCRA § 3007*, dated May 31, 2017.

<sup>22</sup> EPA, [Memorandum](#) to EPA regional counsel, enforcement managers, and office directors, from Assistant Administrator for OECA Susan Parker Bodine, Subject: *Interim Policy on Inspection Report Timeliness and Standardization*, dated June 29, 2018.

Appendix A). Successfully concluding significant enforcement cases requires legally defensible findings, often based on technically complex inspections. Therefore, the expectations created by the inspection report timeliness standard conflict with the Agency’s goal of focusing resources on pursuing the biggest cases because it constrains the evidence-gathering process and disincentivizes complex inspections.

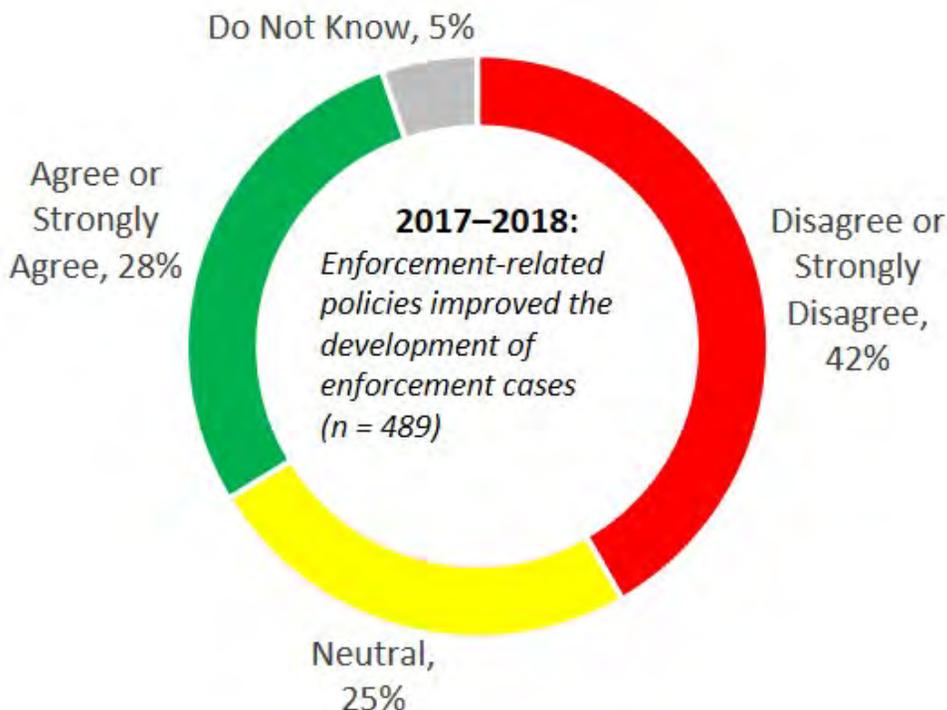
When we surveyed enforcement staff in 2019, just 38 percent of survey respondents agreed or strongly agreed that inspection-related policies in FYs 2017 and 2018 assisted inspectors with conducting inspections to identify noncompliance (Figure 10). In contrast, 62 percent of the respondents agreed with that statement for FYs 2009 through 2016 (see Figure A-6(e) in Appendix A). In addition, only 28 percent of the respondents agreed that enforcement-related policies improved the development of enforcement cases during FYs 2017 and 2018 (Figure 11), down from 64 percent for FYs 2009 through 2016 (see Figure A-15(a) in Appendix A).

**Figure 10: EPA enforcement staff and managers split on whether inspection-related policies assisted with conducting inspections in 2017 and 2018**



Source: OIG analysis of EPA enforcement staff and manager responses to the 2019 OIG Enforcement Survey. (EPA OIG image)

**Figure 11: Enforcement-related policies did not improve the development of enforcement cases in 2017 and 2018 according to EPA enforcement staff and managers**



Source: OIG analysis of EPA enforcement staff and manager responses to the 2019 OIG Enforcement Survey. (EPA OIG image)

Recent changes to the use of SEPs in enforcement actions demonstrate the potential impact on enforcement trends from policies. In March 2020, the assistant attorney general of the DOJ’s Environment and Natural Resources Division issued a memorandum barring nearly all uses of SEPs in civil judicial enforcement actions.<sup>23</sup> The EPA originally concluded that, as a result of the memorandum, it would no longer include SEPs in most EPA-led administrative enforcement actions. In December 2020, the DOJ published a rule codifying the memorandum’s restrictions in DOJ regulations.<sup>24</sup> As seen in Table D-1 in Appendix D, the number of SEPs within enforcement actions decreased by 49 percent in FY 2020, from 81 in FY 2019 to 41 in FY 2020. The DOJ withdrew the March 2020 memorandum in February 2021,<sup>25</sup> but the DOJ has not revoked the rule.

<sup>23</sup> DOJ, Memorandum to Environment and Natural Resources Division deputy assistant attorney generals and section chiefs, from Assistant Attorney General Jeffrey Bossert Clark, Subject: *Supplemental Environmental Projects (“SEPs”) in Civil Settlements with Private Defendants*, dated March 12, 2020.

<sup>24</sup> See 85 Fed. Reg. 81409, December 16, 2020.

<sup>25</sup> DOJ, Memorandum to Environment and Natural Resources Division section chiefs and deputy section chiefs, from Deputy Assistant Attorney General Jean E. Williams, Subject: *Withdrawal of Memoranda and Policy Documents*, dated February 4, 2021.

## **Recent Increases in Deference to State Enforcement Programs Affected Federal Enforcement Trends**

Congress designed environmental statutes so that the states can play a lead role in enforcement. According to the Environmental Council of the States, the EPA delegated the implementation and enforcement of 96 percent of environmental laws to states. These delegations make states coregulators with the EPA. This regulatory design requires state programs to be at least as protective as federal requirements compel and the EPA to serve an oversight role and to fill gaps in protection left by the states.

In 2017, the EPA began increasing its emphasis on deference to state programs, which had important effects on federal enforcement trends. Whether those effects have consequences for human health and the environment depends on whether states have the capacity and the political will to enforce environmental laws. Many interviewees and survey respondents expressed skepticism that states have the technical and operational capacity, along with the political will, to enforce environmental laws consistently and equitably across the country.

Discretionary policies reflect leadership enforcement strategies. For example, several policy documents released beginning in 2017 at the EPA and the DOJ highlighted the emphasis on cooperative federalism. In practice, this cooperative federalism has ranged from mostly normal (no change to existing) coordination with the states in some regions to completely deferring nearly all enforcement to states. For example, based on interviews with EPA enforcement managers and reviews of written communication between EPA Region 7 and the Missouri Department of Natural Resources, we found that the EPA ceased nearly all federal enforcement activity in Missouri beginning in 2017. When interviewed by the OIG in April 2019, Assistant Administrator Bodine said she did not know whether state inspections increased as federal inspections decreased.

According to interviewees and survey respondents, the increased deference to states has translated into reduced enforcement outputs by the EPA since 2017. EPA enforcement managers explained in a May 2019 interview that states were given opportunities to develop cases even after the EPA found the violations. While the environmental statutes allow this arrangement, this deference affects EPA enforcement trends. Prior to 2017, the EPA generally assumed responsibility to develop and conclude cases associated with violations identified during federal inspections.

### ***Deference to State Environmental Programs Raises Concerns for Protection of Human Health and the Environment***

A key goal of the EPA's enforcement program is to protect people and the environment by ensuring compliance with environmental laws. Achieving that goal relies on state-delegated programs being as protective as the federal program.

The success of the overall enforcement program depends on states having sufficient resources and political will. Continued EPA involvement encourages neighboring states to cooperate to address shared environmental problems. However, OECA managers and former OECA leaders, in interviews, and enforcement staff, in responding to the OIG survey, expressed concern that state programs were inconsistent in enforcing environmental laws such that everyone was equally protected from pollution across the country. These concerns suggest that the EPA and states were not maintaining a combined enforcement level equal to what it was prior to the EPA's increased deference to state programs.

Nakayama and Giles expressed concerns over OECA's emphasis on deference to state enforcement programs since 2017. Giles said that many states will not ask the EPA to bring enforcement cases, much to the detriment of people who live in those states. Giles explained that cooperative federalism has always created tensions, but that all parties had to cooperate with each other. The state could voice concerns, but the EPA could also decide that people in different locations all deserved to live without harm to their health that may result from underenforcement of environmental laws. Giles believed the decrease in the number of EPA cases and referrals to the DOJ was a result of the EPA's decision to defer to states. Giles predicted that the deference will ultimately hurt states because a regulated entity may become more inclined to push back against state enforcement programs if they do not think the federal government will become involved.

Nakayama highlighted the need for the EPA to take the lead in environmental enforcement to avoid situations in which states accelerate deregulatory agendas to attract industry to their areas. Nakayama told us that states have different priorities and resources to enforce environmental laws, which creates a need for a consistent federal enforcement role. Nakayama added that it should not depend on which state a person lives in whether that person has clean air, land, and water.

Catherine McCabe, commissioner for the New Jersey Department of Environmental Protection from January 2018 to January 2021 and a former EPA

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**2019 OIG Survey of EPA Enforcement Personnel:  
Deference to States on Inspections  
and Case Development**

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We received 96 survey comments about collaborating with states on inspections. Respondents most frequently stated that:

- State enforcement programs had insufficient capacities to conduct inspections.
- State capacities to conduct inspections varied from state to state.
- In some cases, EPA-state relationships in terms of the Agency's oversight of, support of, or collaboration with states functioned poorly.

We received 158 survey comments about collaborating with states to pursue and develop enforcement cases. Respondents commonly noted that:

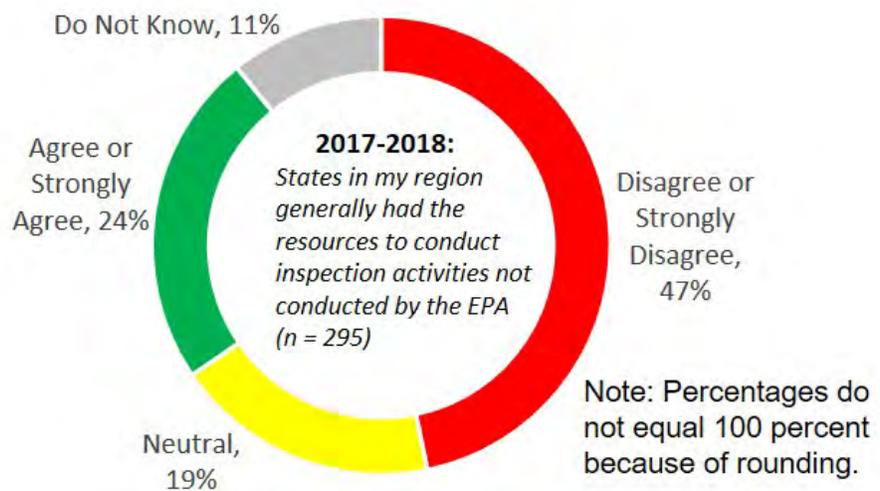
- States lacked the resources, expertise, or political will to take appropriate enforcement actions without the EPA.
- State capacity varied from state to state.

official,<sup>26</sup> told us in May 2019 that an emphasis on cooperative federalism causes variable environmental enforcement levels across the country. Moreover, McCabe stated that the administration that began in 2017 did not push regions to generate enforcement cases. Thus, from this discussion, we concluded that states that have little political will to aggressively pursue enforcement or that lack sufficient resources to enforce environmental statutes can proceed with little-to-no federal pressure from EPA regional offices or from headquarters to perform its critical role in protecting human health.

Enforcement staff echoed the concerns shared by former leadership regarding deference to state programs:

- For FYs 2017 and 2018, less than one-third (28 percent) of survey respondents agreed that the EPA did not overly defer to state inspection regimes, compared to 57 percent for both FYs 2006 through 2008 and FYs 2009 through 2016 (see Figure A-10(g) in Appendix A).
- Less than one-quarter (24 percent) of survey respondents agreed that states generally had the resources to conduct inspection activities not conducted by the EPA during FYs 2017 and 2018 (see Figures 12, below, and A-10(a) in Appendix A).

**Figure 12: States generally did not have the resources to fill inspection voids left by the EPA in 2017 and 2018 according to EPA enforcement staff and managers**

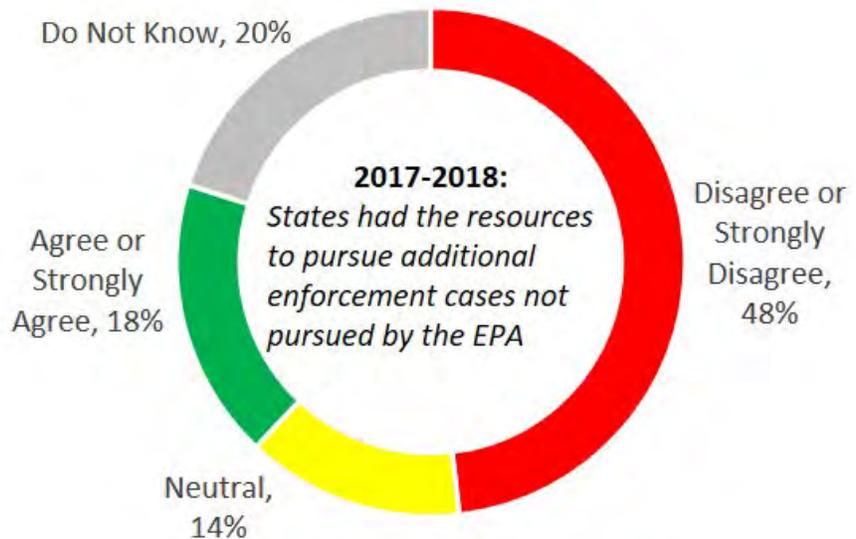


Source: OIG analysis of EPA enforcement staff and manager responses to the 2019 OIG Enforcement Survey. (EPA OIG image)

<sup>26</sup> McCabe served in several official capacities at the EPA, including as the principal deputy assistant administrator for OECA from 2005 to 2011, a judge on the Agency’s Environmental Appeals Board from 2011 to 2014, and the acting administrator for the EPA from January to February 2017.

- Less than half of survey respondents (46 percent) agreed that the EPA monitored state inspection work to ensure that compliance monitoring met criteria during FYs 2017 and 2018 (see Figure A-10(e) in Appendix A).
- About one in five survey respondents (18 percent) agreed that states had the resources to pursue additional enforcement cases not pursued by the EPA during FYs 2017 and 2018 (see Figure 13 below and Figure A-16(b) in Appendix A).

**Figure 13: States generally did not have the resources to fill enforcement case voids left by the EPA in 2017 and 2018 according to EPA enforcement staff and managers**



Source: OIG analysis of EPA enforcement staff and managers responses to the 2019 OIG Enforcement Survey. (EPA OIG image)

- One-quarter of survey respondents agreed that states for FYs 2017 and 2018 had the technical expertise to pursue additional enforcement cases not pursued by the EPA (see Figure A-16(c) in Appendix A). Furthermore, 43 percent of survey respondents felt that states in their region generally contacted the regional EPA office when they needed technical expertise to conduct complex inspections during FYs 2017 and 2018 (see Figure A-10(c) in Appendix A).
- For FYs 2017 and 2018, less than one-third (29 percent) of survey respondents agreed that the EPA followed up on the status of enforcement cases that were referred to states to determine whether states took appropriate actions and facilities returned to compliance (see Figure A-16(f) in Appendix A).

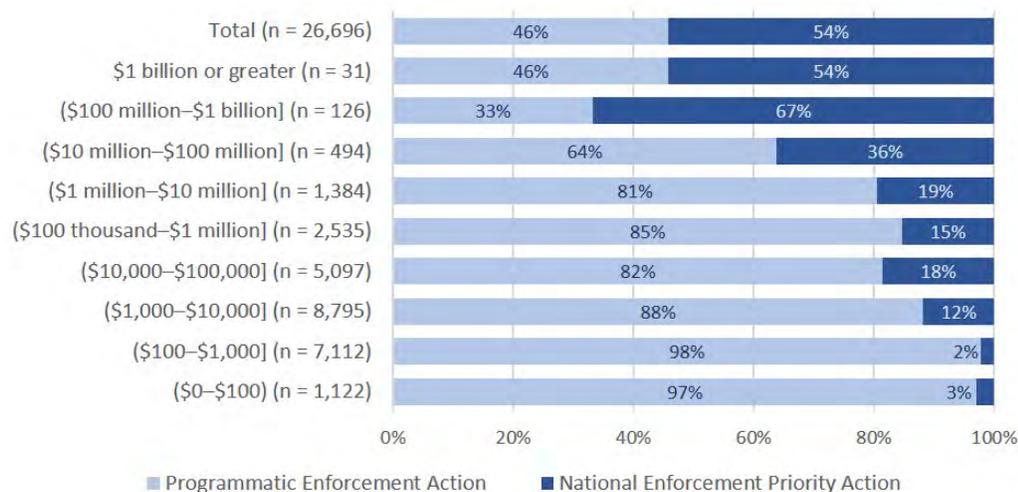
For environmental requirements to be well-monitored and enforced, states must have the capacity and leadership commitment to take on the work that the EPA defers to them. Taken together, the OIG enforcement survey results and reports from nonprofit groups and the media indicate that state enforcement programs do not meet those requirements, but we did not independently verify that states lack this capacity. Survey respondents described insufficient state enforcement program capacities overall, but many respondents also noted that state capacity varied from state to state.

The EPA's oversight and assistance to states could fill gaps created by weak state programs, but EPA staff reported breakdowns on both the Agency's and states' ends of that process. For example, survey respondents commonly described a poorly functioning EPA-state relationship in terms of the Agency's oversight of, support of, or collaboration with states. Despite the noted capacity limitations at the state level, survey respondents indicated that states did not consistently contact the regional EPA office when they needed technical expertise to conduct complex inspections during FYs 2017 and 2018. Since FY 2008, the EPA OIG has identified oversight of states and tribes as a top management challenge because audits issued by our office and the GAO have shown that oversight concerns persist across programs. We also concluded that the Agency is not likely to fully meet this challenge in the near-term because of resource limitations and the complexity of the issue.

## **National Enforcement Priorities Affected EPA's Annual Enforcement Results**

The EPA sets priorities for its national enforcement program every two to four years to focus enforcement resources and expertise on serious environmental problems. Our data analysis shows the priorities had varying effects on the EPA's annual enforcement results. The proportion of compliance monitoring activities linked to an enforcement priority generally increased from FYs 2009 through 2018. This trend shows that OECA and EPA regions prioritized targeting inspections and other monitoring activities at priority facilities over other programmatic areas. However, the proportion of priority-linked concluded enforcement actions did not change substantially over time. Concluded enforcement actions associated with large monetary enforcement results or environmental outcomes were generally more likely to be part of a national enforcement priority. For example, the total dollars of injunctive relief, which comprises most of the total monetary enforcement results, tended to be part of a national enforcement priority. From FYs 2007 through 2018, 54 percent of the \$139 billion of injunctive relief resulted from priority enforcement actions, largely because most enforcement actions with greater than \$100 million in injunctive relief were linked to a national enforcement priority (Figure 14).

**Figure 14: Proportion of injunctive relief dollars by case size (2018 USD) and national enforcement priority status, FYs 2007 through 2018**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

In addition, while enforcement actions with large monetary or environmental outcomes were more likely to be part of a national priority than those with smaller outcomes, the direction or nature of any causal relationship is complex. On one hand, the EPA has selected those priorities because those types of cases address serious environmental risks, which should be reflected in the enforcement measures. On the other hand, the EPA also steers resources toward its identified priorities, enabling staff to pursue large enforcement actions for relevant violations.

## Leadership Influenced EPA’s Enforcement Culture, Which Indirectly Affected Enforcement Trends

We found that leadership support for enforcement influenced the EPA’s enforcement culture, which indirectly affected enforcement trends. The culture affects both regulated industries’ concerns about the possibility of enforcement and EPA staff’s morale and commitment to Agency results. Although the culture is an intangible organizational trait based on enforcement staff and manager perceptions, it translates into a meaningful impact on the activities of EPA staff in the Agency’s enforcement program. We assessed these perceptions through interviews and responses to our national enforcement survey. We found that the enforcement staff’s perception of support from leadership decreased beginning in 2017.

**Culture** consists of an organization’s shared beliefs and values established by leaders and then communicated and reinforced through various methods, ultimately shaping employee perceptions, behaviors, and understanding. Both the GAO and the Office of Management and Budget stress “creating results-oriented organizational cultures.”

**Joel Mintz in *Enforcement at the EPA: High Stakes and Hard Choices (2013 edition)*:**

Under [Granta] Nakayama's shrewd and strong leadership, certain aspects of EPA's enforcement work enjoyed a partial revival. The agency continued to devote resources in the pursuit of 'global settlements' in cases with the greatest potential for protecting human health and the environment. It put greater emphasis on explaining enforcement success in terms of pounds of pollutants reduced—and medical costs avoided—as a result of enforcement actions. Moreover, beyond its long-delayed but nonetheless striking success in its [New Source Review] cases against electric utilities, which yielded meaningful public health benefits, EPA's enforcement program negotiated important environmentally beneficial settlement agreements with oil refineries, acid plants, cement plants, and large homebuilders.

Enforcement personnel generally had positive recollections of leadership support for enforcement work during FYs 2006 through 2008 (Figure 15). Nakayama, the OECA assistant administrator at that time, told us that, with support from the Agency's administrator, he was able to signal support for enforcing environmental laws to EPA enforcement staff and to the regulated community. He also reported that he took concrete steps to redirect policies that constrained enforcement activities, such as those that precluded most New Source Review cases under the CAA.

Respondents to our 2019 survey reported that their perception of management support for their inspections and case development changed over the period we examined. The perceived support remained relatively steady during FYs 2006 through 2016 (Figure 15), despite declining resources, starting in FY 2011 (Figure 6). Survey respondents indicated that the level of perceived support decreased after FY 2016. The decrease was greater when respondents were asked about support from their regional and national leaders compared to their more immediate managers.

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**2019 OIG Survey of EPA Enforcement Personnel:  
Leadership Support for  
Developing Enforcement Cases**

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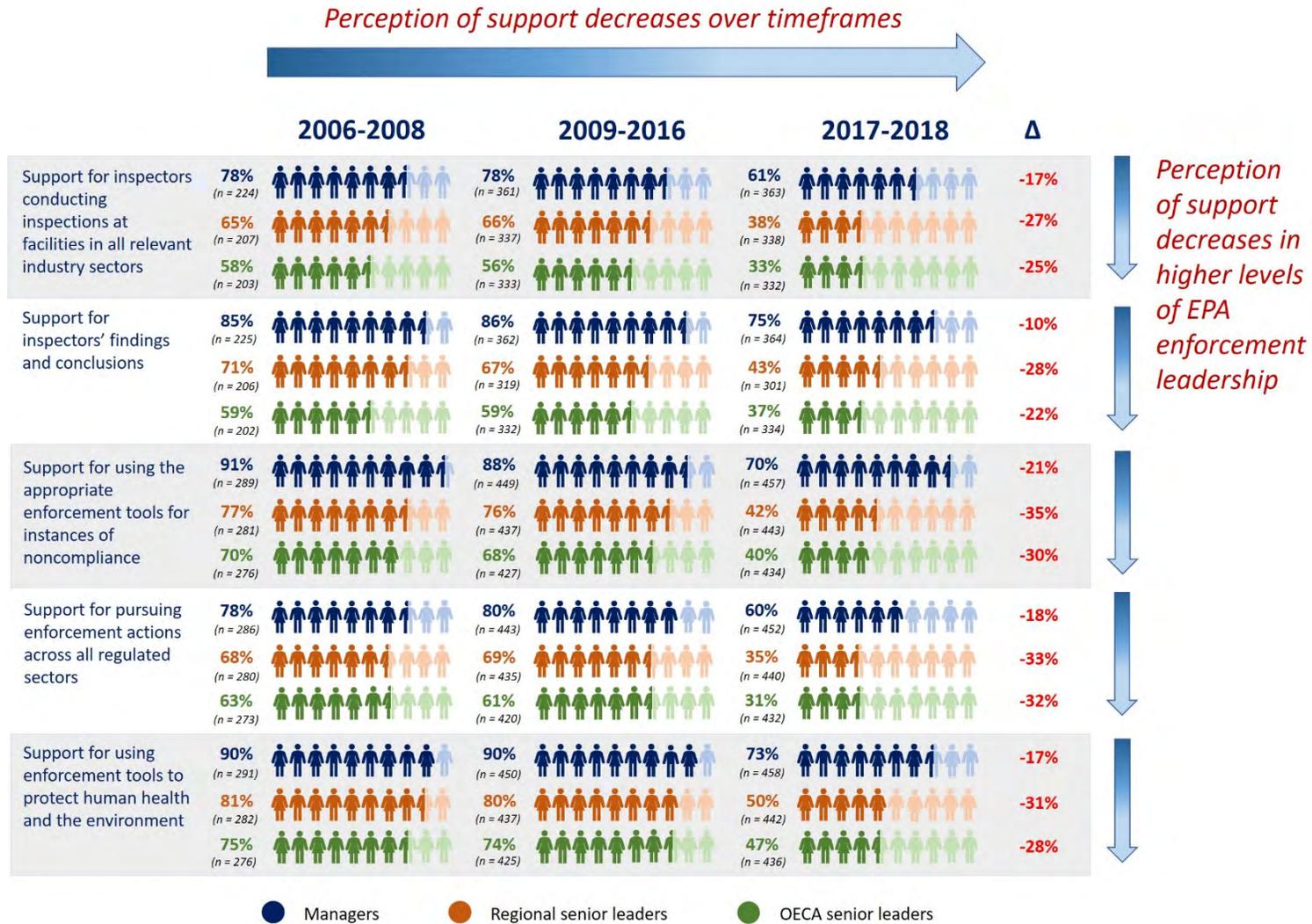
We received 111 survey comments about **managers' support** for developing enforcement cases. The most common opinion expressed was that direct manager support for enforcement was adequate. Other respondents attributed changing support for and the slowdown of enforcement to political considerations, senior leadership, and a lack of resources.

We received 109 comments about **regional senior leaders' support** for developing appropriate enforcement cases. The most common theme was that members of senior leadership do not support enforcement against certain sectors or entities, such as municipal governments. Some respondents expressed that political considerations or political appointee actions constrained enforcement.

We received 95 comments about **OECA senior leaders' support** for developing appropriate enforcement cases. Common themes included that OECA:

- Senior leaders interfered with enforcement.
- Policies and requirements made enforcement more difficult.
- Senior leaders did not support using the correct or appropriate enforcement tools.
- Senior leaders did not support enforcement against certain sectors or entities, such as municipal governments.

**Figure 15: EPA staff perceptions of leadership support for compliance monitoring activities and case development, as indicated by agreement or strong agreement with statements from the 2019 OIG Enforcement Survey (n = 990)**



Source: OIG analysis of EPA enforcement staff and manager responses to the 2019 OIG Enforcement Survey. (EPA OIG image)

Our survey found that the decline in perceived support after FY 2016 impacted the enforcement program in several ways. Staff reported that:

- Morale diminished, which likely led to reduced outputs and outcomes.
- They had lower confidence that some types of cases garner support at higher levels and would be retained at the federal level, which disincentivized compliance monitoring activities and case development in those areas.
- Regulated entities became more willing to push back on EPA's enforcement efforts, leading to longer, more resource-intensive negotiations.
- Regulated entities pushed to reopen concluded enforcement cases to seek an improved outcome, increasing the litigation costs for the Agency.

During our April 2019 interview, the assistant administrator for OECA at that time reported that senior leaders were taking steps, such as meeting in person and virtually with regional enforcement personnel, to combat the perception that the administration did not support a strong enforcement program. The *2019 OIG Enforcement Survey*, administered five months later, showed that enforcement personnel still perceived a reduction in leadership support for enforcement.

EPA leadership can also directly affect enforcement case outcomes and impact Agency employees' perception of leadership support for enforcement actions. For example, in one instance, EPA enforcement staff and managers expressed concerns about a high-level EPA official allegedly influencing negotiations between the federal government and the defendant without the knowledge or consent of the case team. The case team reported that this undermined its ability to settle the enforcement case and cost the Agency time and resources.

## Conclusion

Given the declining environmental enforcement resources and FTEs during a time of economic expansion for multiple sectors, the EPA's changes in leadership, enforcement policies, and enforcement strategies are important factors driving the EPA's enforcement activities and results. These changes, in turn, can impact human health and the environment and consistency across regulated industries.

A primary driver behind the declining trends in enforcement outputs from FYs 2007 through 2018 was the decline in congressional appropriations, which led to fewer enforcement resources and staff. Without a workforce analysis, which is required by Office of Personnel Management regulations, the EPA was unable to align its staffing levels to meet capacity requirements to achieve and maintain a strong enforcement presence. Fulfilling the EPA's mandate to enforce environmental laws relies on the EPA's staff to conduct compliance monitoring activities and to turn detected noncompliance into meaningful cases that penalize

and deter noncompliance. Considering its limited resources, the EPA needs to better assess its resources in order to determine how it will be able to detect harmful noncompliance and develop enforcement cases that deter future wrongdoing.

Through responses to our *2019 OIG Enforcement Survey* (Appendix A), EPA enforcement personnel introduced several areas of concern regarding other drivers of the decline in enforcement activities and results, such as perceived:

- Overdeference to state enforcement programs.
- Hindrance of enforcement activities by policies in place at that time.
- Decreases in support from regional and national leadership during the administration that began in 2017.

These perceptions, which are important indicators of the workforce culture in EPA's enforcement program, deter enforcement personnel from using the most effective strategies for improving compliance with the relevant laws and regulations. Without addressing these concerns and others that the Agency identifies, EPA enforcement personnel will continue to work in an environment that constrains their work protecting human health and the environment and promoting consistency for the regulated community.

## Recommendations

We recommend that the assistant administrator for Enforcement and Compliance Assurance:

1. Assess the needs of the Agency's enforcement program by completing a workforce analysis to determine the level of staffing necessary to achieve and maintain a strong enforcement presence in the field that protects human health and the environment.
2. Integrate the results of the workforce analysis into the Office of Enforcement and Compliance Assurance's annual and strategic planning processes.
3. Use the results of the Office of Inspector General's *2019 Enforcement Survey* and other resources to identify and address areas of concern for the enforcement program, including through issuing new or revised policies, as appropriate.

## Agency Response and OIG Assessment

The Agency provided a response to the draft report on March 26, 2021 (Appendix E). The audit team met with OECA staff and managers on April 7, 2021, to discuss the Agency's response to the recommendations and the

proposed high-level intended corrective actions. As a result of that meeting, the Agency provided a revised high-level corrective actions for Recommendation 3 to supplement its original response (Appendix F) on April 13, 2021.

While the EPA agreed with Recommendations 1 and 2, it objected to the workforce planning solution. The Agency's proposed alternative corrective actions do not meet the intent of our recommendations regarding workforce planning. In the Agency's response, OECA noted that it has maintained a "solid national enforcement presence" by conducting gap analyses and making targeted workforce adjustments each year. In our assessment, these are short-term strategies for mitigating the impact of resource declines on enforcement trends discussed in this report. Our report demonstrates that a decline in funding for the EPA's enforcement program drove the observed declining enforcement trends.

Conducting an Office of Personnel Management-required workforce planning exercise will help the EPA optimize its enforcement resources over the long-term, regardless of whether resources increase in FY 2022 in line with OECA's expectations. According to a senior EPA enforcement manager, a workforce analysis is needed to understand the inconsistent allocation of current enforcement resources. That enforcement manager also noted that current models for distributing resources to the regions date back to the 1980s and are outdated. Conducting a high-level needs assessment to inform distribution of any additional resources provided to OECA in the FY 2022 budget and beyond is insufficient. Workforce planning would allow OECA to identify and reduce gaps in its capacity to implement its statutory enforcement responsibilities, which would help the Agency overcome resource barriers and optimize its organizational structure and personnel deployment to accomplish its goals. The Office of Mission Support provides training on short- and long-term planning for aligning the workforce and related resource allocations with Agency workloads.

The Agency agreed with Recommendation 3 and provided corrective actions that meet the intent of our recommendation in its April 13, 2021 response. The Agency noted that the areas of concern identified by survey respondents may be considered by leadership in future policy setting, as appropriate. The acting assistant administrator for OECA has already used the survey results to inform changes in the enforcement program.

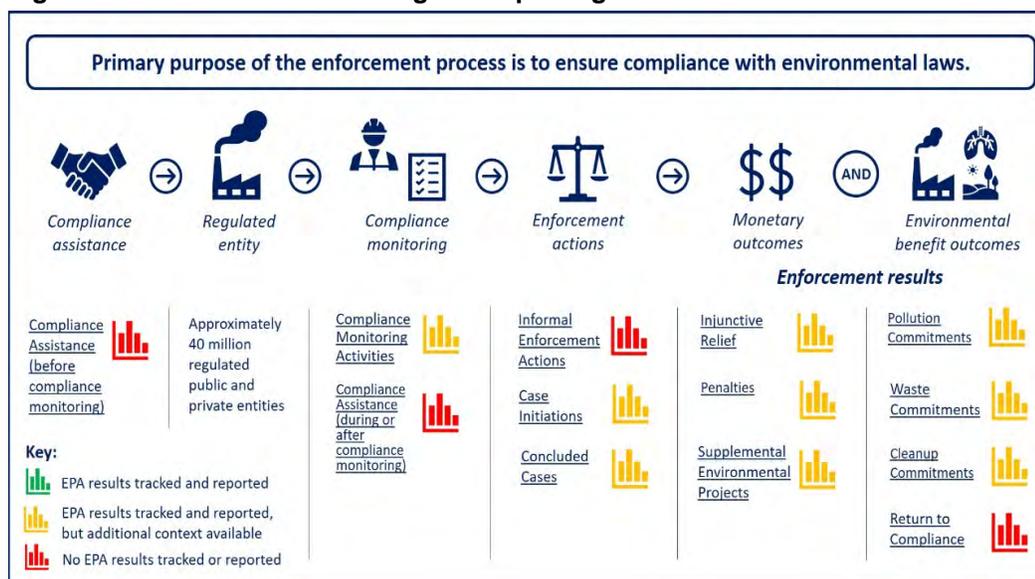
The Agency also provided technical comments, and we updated the report where appropriate.

# Chapter 4

## EPA Can Develop and Track Additional Enforcement Measures and Improve Its Reporting of Annual Enforcement Results

The EPA’s annual enforcement reports only tell part of the story about the EPA’s enforcement accomplishments and the impact these enforcement activities have on human health and the environment (Figure 16). For example, the EPA does not track, measure, or report data for compliance assistance activities and informal enforcement actions. The Agency also does not collect or estimate noncompliance rates or use another method for establishing a baseline against which the Agency can measure the effectiveness of the enforcement program. In addition, while the EPA tracks and reports the number of its compliance monitoring activities and the estimated environmental benefits from enforcement actions, the Agency does not provide additional information that would add context about the scope of these activities, such as the types of inspections conducted or the toxicity of pollutants removed from the environment. All of the annual enforcement data tracked by the EPA are available to the public on the Agency’s website in a spreadsheet, but the Agency could also provide this information publicly in a dashboard similar to the state enforcement dashboards published on its website. The EPA’s inclusion of additional information in its annual enforcement results and preparation of a public dashboard would increase transparency of the enforcement program and provide the public and Congress more information about the full scope of its enforcement program and the manner in which the program helps achieve human health and environmental goals.

**Figure 16: Status of EPA tracking and reporting efforts for enforcement results**



Source: OIG analysis of the EPA’s annual enforcement results. (EPA OIG image)

## EPA Lacks Measures for Compliance Assistance Activities and Noncompliance Rates

While the EPA tracks and annually reports a wide variety of information about its enforcement program, we found two areas in which the Agency does not measure performance for its enforcement achievements. First, the EPA does not track, measure, or report compliance assistance activities, such as training or technical assistance, or informal enforcement actions that inform the regulated entity of violations without a formal enforcement action. Second, the Agency does not collect or estimate noncompliance rates or use another method for establishing a baseline against which the Agency can measure the effectiveness of the enforcement program. As such, the EPA cannot measure or demonstrate how the Agency's enforcement activities influence overall compliance. Tracking and reporting on these parameters would provide a more complete picture of the Agency's work within the enforcement process and would demonstrate the impact compliance assistance and informal enforcement actions have on improving compliance over time.

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### 2019 OIG Survey of EPA Enforcement Personnel: Enforcement Measures

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We received 148 survey comments about EPA enforcement measures. These comments focused primarily on the accuracy or legitimacy of the EPA's estimates for these measures. The comments also included suggestions for improvement like the following:

- Modify measures to reflect trends in returning regulated entities to compliance and decreases in repeat violations.
- Create a uniform way of measuring environmental benefits achieved.
- Provide people with context about what the reported measures mean.

### ***EPA Does Not Include Measures About Compliance Assistance or Informal Enforcement Actions in Its Annual Results***



The EPA does not include measures about compliance assistance or informal enforcement actions in its annual enforcement results report. In January 2020, the GAO reported that the EPA does not require regional offices to collect and maintain data about compliance assistance activities. The GAO also found that EPA regional offices do not consistently collect or maintain data on informal enforcement actions, such as warning letters or notices of violation.<sup>27</sup> The GAO recommended that the assistant administrator for OECA provide guidance to regional offices, clarifying that the regional offices should collect data on compliance assistance and informal enforcement activities. During the GAO's audit, the EPA informed the audit team that it did not intend to require regional offices to collect data about compliance assistance activities, but ultimately agreed with the GAO's recommendations to collect this data.

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<sup>27</sup> GAO, *Environmental Protection: Additional Action Needed to Improve EPA Data on Informal Enforcement and Compliance Assistance Activities*, [GAO-20-95](#), January 31, 2020. As of February 16, 2021, the three recommendations included in the GAO's report remain open.

The EPA does not include informal enforcement actions in its annual enforcement results reports, but the Agency collects data on these types of actions. From FYs 2007 through 2018, the EPA issued 9,434 informal enforcement actions in the form of:

- Letters of violations and warning letters (1,654 letters, or 18 percent of the total informal actions)—77 percent of the letters of violation and warning letters were issued under FIFRA authorities.
- Notices of noncompliance (2,281 notices of noncompliance, or 24 percent of the total informal actions)—86 percent of the notices of noncompliance were issued under Toxic Substance Control Act authorities.
- Notices of violation (5,499 notices of violation, or 58 percent of the total informal actions)—83 percent of the notices of violation were issued under SDWA authorities.

Because the EPA has incomplete data for informal enforcement actions, these numbers are likely underreported in the Agency’s enforcement database. In the Agency’s response to the GAO recommendations, the EPA indicated informal enforcement actions would be tracked and that it anticipated that those actions would be included in the annual enforcement results beginning in FY 2020. All of the EPA’s state enforcement dashboards, discussed later in this chapter, allow the public to view informal enforcement actions taken by the EPA within a particular program area, such as air or drinking water.

As the Agency moves forward with implementing the GAO’s recommendations, the EPA should consider including information about compliance assistance and informal enforcement actions in future reports of annual enforcement results. Sharing information about compliance assistance activities is important given the Agency’s emphasis on the use of compliance assistance as part of the enforcement toolbox in the *FY 2018–2022 EPA Strategic Plan*. The EPA also renamed its national enforcement priorities “national compliance initiatives” in August 2018 to focus on the overarching goal of increased compliance through formal enforcement actions and other compliance tools, such as compliance assistance and informal enforcement actions. When the EPA includes information about compliance assistance and informal enforcement in reports, it could also provide context about the types of activities completed and the different levels of complexity those activities involved to provide an accurate picture of the work these efforts required. This would increase transparency and provide the public and Congress with a more complete picture of the Agency’s enforcement program.

## ***EPA Does Not Track Noncompliance Rates and Cannot Associate Enforcement Activities with Changes in Compliance Behavior***



Compliance  
monitoring



Environmental  
benefit outcomes

The EPA does not measure or track noncompliance rates and cannot associate its enforcement activities with changes in regulated entities' compliance behavior. The overall goal of the EPA's civil enforcement program is to maximize compliance with environmental requirements to protect human health and the environment. In response to our 2019 survey of EPA enforcement staff, 36 percent of respondents did not know or disagreed that the Agency tracked and measured whether EPA-concluded cases contributed to improved compliance and protection of human health and the environment (see Figure A-22(c) in Appendix A).

Noncompliance rates serve as indicators of the enforcement program's effectiveness at resolving and deterring noncompliance and identify emerging compliance problems that impact human health and the environment. The enforcement program's knowledge about the noncompliance status within a regulated universe can vary. For example, in one sector with a known number of regulated entities, the EPA might have reliable and recent information to form a reasonable estimate of the noncompliance status of every regulated entity in the sector and be able to demonstrate effectiveness of the enforcement program at resolving existing and deterring future noncompliance. Developing compliance or noncompliance rates on a sector or geographic basis suffices for identifying sector-based or geographically focused compliance or noncompliance problems. In a sector with a very large or unknown number of regulated entities, the EPA does not know about noncompliance within significant parts of the regulated universe. When the EPA does not possess information about the regulated universe's noncompliance, it lacks the ability to measure the extent to which the Agency's compliance and enforcement activities improve compliance.

Developing noncompliance rates is difficult for most environmental programs because the programs do not have the information necessary to calculate such rates. We documented this and other difficulties in prior reports, including the limited knowledge of the regulatory universe,<sup>28</sup> the lack of performance measures focused on outcomes, such as noncompliance rates,<sup>29</sup> and the manner in which other federal agencies overcame these types of obstacles.<sup>30</sup> In these prior reports, we issued various recommendations to develop measures to assess how the EPA's enforcement actions deter noncompliance in sectors and environmental programs over time, but the Agency has not developed measures that would assist with these types of assessments. We have also previously recommended that OECA

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<sup>28</sup> EPA OIG, *Limited Knowledge of the Universe of Regulated Entities Impedes EPA's Ability to Demonstrate Changes in Regulatory Compliance*, Report No. [2005-P-00024](#), September 15, 2005.

<sup>29</sup> EPA OIG, *EPA Performance Measures Do Not Effectively Track Compliance Outcomes*, Report No. [2006-P-00006](#), December 15, 2005.

<sup>30</sup> EPA OIG, *Overcoming Obstacles to Measuring Compliance: Practices in Selected Federal Agencies*, Report No. [2007-P-00027](#), June 20, 2007.

determine whether consent decrees signed as part of a national enforcement priority lead to improved compliance.<sup>31</sup>

The EPA has established strategic goals to improve compliance within two programs:

- One of the EPA’s national enforcement priorities for FYs 2020–2023 aims to reduce the number of facilities in significant noncompliance with their National Pollutant Discharge Elimination System permits by 50 percent by the end of FY 2022, from a significant noncompliance baseline of 20.3 percent. This priority supports the Agency’s strategic goal to improve environmental law compliance.
- Another of the EPA’s national enforcement priorities for FYs 2020–2023 aims to reduce the number of community water systems out of compliance with health-based drinking water standards by 25 percent by the end of FY 2022.

While tracking facilities in known noncompliance or significant noncompliance and reducing such noncompliance represent important indicators of the enforcement program’s success, the EPA cannot provide an overall measure of compliance for Agency’s programs. As the EPA moves forward in pursuing its long-term compliance improvement goals, the Agency should consider developing and providing noncompliance rates or other baseline measures in future reports of annual enforcement results to provide the public and Congress with a more complete picture of the Agency’s enforcement program and its progress toward reaching enforcement goals.

## **EPA’s Annual Results for Compliance Monitoring Activities and Environmental Benefits Do Not Capture Full Scope of These Measures**

The EPA tracks and annually reports a wide variety of information about its enforcement program, and each of the measures reported is useful to understand parts of the enforcement program. For most of the measures, the Agency reports aggregate numbers without providing additional context that describes the complexity or seriousness of what is reported (Figure 16). While the Agency could provide additional context about case initiations and conclusions, injunctive relief, penalties, and supplemental environmental projects, we primarily focus our discussion in this section on compliance monitoring activities and the three environmental benefits. The EPA collects additional information about compliance monitoring activities and environmental benefits that could provide additional context about these measures in its annual reports (Table 4). Providing

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<sup>31</sup> EPA OIG, *EPA Needs to Demonstrate Whether It Has Achieved the Goals It Set Under the National Petroleum Refinery Initiative*, [14-P-0184](#), April 15, 2014.

additional context would increase the Agency’s transparency in the enforcement program. Without this additional context, Congress and the public cannot understand the full scope of the EPA’s compliance monitoring activities or the impact enforcement actions have on improving the environment.

**Table 4: Additional information or context the EPA could provide for the compliance monitoring and environmental benefits measures**

Enforcement measure	Information EPA included in its FY 2019 annual enforcement report	Additional context EPA could provide in its annual reports
 <p>Compliance monitoring activities</p>	<ul style="list-style-type: none"> <li>• Number of federal inspections and evaluations.</li> <li>• EPA inspections represent a fraction of the total number of inspections conducted in the CWA, CAA, and hazardous waste programs.</li> </ul>	<ul style="list-style-type: none"> <li>• Type and complexity of inspections and evaluations conducted.</li> <li>• Statute under which the inspection was conducted.</li> <li>• Region where the inspection was conducted.</li> </ul>
 <p>Commitments to reduce, treat, or eliminate pollutants</p>	<ul style="list-style-type: none"> <li>• Estimated commitments to reduce, treat, or eliminate pollution (in pounds) from concluded enforcement cases.</li> <li>• Increased focus on reducing toxic pollutants.</li> </ul>	<ul style="list-style-type: none"> <li>• Categories of pollutants (toxic versus nontoxic).</li> <li>• Specific pollutants of highest concern.</li> <li>• Statute under which the commitments are claimed.</li> <li>• Region where case concluded.</li> <li>• Large concluded cases influencing the results.</li> </ul>
 <p>Commitments to treat, minimize, or properly dispose of hazardous waste and nonhazardous waste</p>	<ul style="list-style-type: none"> <li>• Commitments to treat, minimize, or properly dispose of waste (in pounds) from concluded enforcement actions.</li> <li>• Influence of one large case on results in FY 2016.</li> </ul>	<ul style="list-style-type: none"> <li>• Categories of hazardous waste (hazardous versus nonhazardous or specific categories of wastes).</li> <li>• Specific pollutants of highest concern.</li> <li>• Statute under which the commitments are claimed.</li> <li>• Region where the commitments occur.</li> </ul>
 <p>Commitments to clean up contaminated soil and water</p>	<ul style="list-style-type: none"> <li>• Estimated commitments to clean up contaminated soil (in cubic yards) from concluded enforcement actions.</li> <li>• Estimated commitments to clean up contaminated water (in cubic yards).</li> <li>• Estimated volumes do not capture the complexity of cleanups.</li> </ul>	<ul style="list-style-type: none"> <li>• Categories of cleanup complexity.</li> <li>• Specific pollutants of highest concern.</li> <li>• Region where the commitments occur.</li> </ul>

Source: OIG analysis of the EPA’s annual enforcement results. (EPA OIG table)

## ***EPA's Reporting on Compliance Monitoring Activities Does Not Provide the Full Context of These Activities***



The EPA tracks and reports the total number of compliance monitoring activities it conducts each year but provides limited context for what the numbers for this measure mean (Table 4). Compliance monitoring activities (1) take different levels of effort to complete and (2) assess compliance under different environmental statutes within industry sectors and in different geographic areas. The EPA internally tracks this information and could provide the public with this additional context about the scope of its compliance monitoring activities.

Such additional details about the types of compliance monitoring activities conducted by the Agency could indicate whether the EPA focused on simple or more complex and resource-intensive compliance monitoring activities within the year. More details about the environmental statute and EPA region the compliance monitoring activities occurred under or in could also demonstrate results or accomplishments within the Agency's focus areas, such as a national enforcement priority, or identify areas where large decreases in efforts occurred.

## ***EPA's Reporting of Environmental Benefits Does Not Provide Context About the Magnitude of Commitments or Impact on Human Health and the Environment***



The EPA tracks and reports estimated commitments towards environmental benefits that result from enforcement actions with minimal explanation about the toxicity of the pollutants being removed or treated over time or the complexity of the cleanup commitments (Table 4). For example, in the FY 2019 annual enforcement report, the EPA reported:

- **An estimated 347 million pounds in commitments to reduce, treat, or eliminate pollutants**—Beginning in FY 2016, the EPA increased focus on reducing toxic pollutants. However, it did not include information about what types of pollutants were being reduced or whether the pollutants were considered toxic in the annual results. The EPA estimated that from FYs 2012 through 2019, the total commitments to reduce, treat, or eliminate mercury from air and lead from water equated to 42,000 pounds and over 185,000 pounds, respectively. These numbers contrast with the 860 million pounds of sediment the EPA estimated would be reduced, treated, or eliminated from water from FYs 2012 through 2019. The EPA could explain that mercury in air and lead in water represent smaller commitments in pounds relative to sediment commitments, but also represent higher environmental benefits because of their higher toxicity to human health and impact on the environment.

- **Over 12 million cubic yards in commitments to clean up contaminated soil and water**—The EPA acknowledged that the vast majority of commitments occur as a result of concluded enforcement actions under CERCLA and that this measure, taken alone, did not capture the magnitude or complexity of the cleanup effort. The EPA could include information about what a complex cleanup means or what types of pollutants were being cleaned up as part of these concluded enforcement actions, although that information is available in enforcement data. For example, enforcement data show that an estimated 11.3 million cubic yards of soil or debris and 400 million cubic yards of water or aquifers contaminated with perchlorate—a chemical commonly used in rocket fuels, munitions, and fireworks—would be cleaned up as a result of concluded enforcement actions from FYs 2012 through 2019.
- **Over 4.7 million pounds in commitments to treat, minimize, or properly dispose of hazardous waste and nonhazardous waste**—The Agency stopped publicly tracking hazardous and nonhazardous waste separately in FY 2016. It now reports these commitments as one measure in the annual reports. While hazardous waste is the primary category of waste being treated as a result of EPA enforcement actions, there are more-specific categories of hazardous waste, such as chromium, tracked by the Agency that could be included in the annual enforcement reports to provide additional context.

Reporting transparency is vital so that stakeholders can determine whether OECA’s strategies, policies, and programs are effective and have led to a successful enforcement program. Providing additional contextual information in annual enforcement reports would help the public understand the type and magnitude of environmental benefits being achieved by the Agency from its concluded enforcement actions and the impact on protecting human health and the environment.

## **EPA Tracks Its Enforcement Trends in Internal Dashboard and Provides Public Dashboards for Five Media Programs**

The EPA tracks the Agency-specific enforcement data and information discussed in this report in an internal dashboard with a user-friendly interface and provides public dashboards for state and EPA enforcement activities in five programs. While the internal dashboard is only available to EPA personnel, the underlying data is publicly available on the Agency’s website as a downloadable spreadsheet.<sup>32</sup> These efforts are good examples of increasing the transparency of the Agency’s enforcement program. Sharing additional context about federal enforcement activities and actions in a publicly available dashboard would

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<sup>32</sup> The EPA posts data files that contain enforcement data on its public [website](#).

provide the public with easier access to EPA-led enforcement data and results and allow the public to understand how different activities in the enforcement process contribute to enforcement results and environmental benefits.

The EPA’s public dashboards show EPA and state enforcement trends for the air, drinking water, hazardous waste, pesticides, and water programs.<sup>33</sup> While the Agency includes EPA-led activities in the state dashboards, it does not have a separate dashboard to view only EPA-led activities. The public dashboards contain similar information to the EPA’s internal dashboard in addition to information about the number of facilities in a particular program, significant or high-priority violations or noncompliance, and returns to compliance. Figure 17 is an example of what is seen on a state dashboard. With the state dashboards, the public can quickly look at key environmental compliance and enforcement measures and change how they view the data to include data from a particular state or from a specific category of inspections or violations. The EPA provides these public dashboards to increase transparency of programmatic enforcement activities.

Figure 17: Screenshot of the EPA’s public national water activity dashboard



Source: EPA’s Enforcement Compliance History Online website (as of April 26, 2021). (EPA OIG image)

<sup>33</sup> The EPA’s state dashboards for air, drinking water, hazardous waste, pesticides, and water programs are available on the Enforcement Compliance History Online [website](#).

The EPA provides caveats on the public dashboards that explain the known data limitations for the programs. For example, users may not see a complete data set because the EPA verifies data annually and the year may not be completed. A public dashboard showing the results and anticipated outcomes from EPA-led enforcement activities and actions could provide the additional context for the steps in the enforcement process that we discuss in this chapter.

***Example of a Data-Related Caveat from the Drinking Water Dashboard***

Data shown in the state dashboards are based on data reported to the EPA and may not reflect all compliance monitoring/inspections, enforcement, or the full extent of noncompliance within a state. State environmental agencies may have more information on activities and noncompliance within their area on their websites.

## **Conclusion**

The annual enforcement results that the EPA tracked and reported at the time of this report did not provide the most comprehensive picture available to the EPA of its enforcement program and the impact and outcomes of the program. Some Agency enforcement program efforts, such as compliance assistance and noncompliance rates, were not tracked during the time frame of this audit; without this type of information, the Agency cannot assess progress with these enforcement activities and results. Without performance measures that assist the Agency in assessing the full scope of the enforcement program and information about the changes in compliance behavior within a regulated community, the EPA cannot discern nor demonstrate the overall effectiveness of its compliance and enforcement efforts at improving compliance and protecting human health and the environment.

When the EPA issues its annual enforcement reports, the Agency generally does not provide enough context about the reported measures, such as the impact of enforcement activities. Providing such context in the annual reports would increase transparency of EPA-led enforcement activities and actions. In addition, a public dashboard showing EPA-led enforcement activities and actions would be a valuable tool and would provide a platform to deliver additional context for steps in the enforcement process. These efforts together would further transparency and allow the public to review additional data on how the EPA is working to achieve its human health and environmental goals.

## Recommendations

We recommend that the assistant administrator for Enforcement and Compliance Assurance:

4. Incorporate additional enforcement information and data into future annual enforcement results reports to provide context for (a) compliance monitoring activities conducted by the Agency and (b) the estimated environmental benefits achieved through Agency enforcement actions.
5. Establish additional measures for Agency-led compliance assistance activities and informal enforcement actions and include these new measures in future annual enforcement results reports with the appropriate context.
6. Evaluate the annual enforcement performance measures to assess whether additional context should be provided for other reported measures or whether additional measures should be included in future reports to fully capture the scope of the Agency's enforcement program.
7. Develop and track noncompliance rates within environmental programs or use other innovative approaches that would indicate the success of enforcement activities at returning entities to compliance.
8. Develop and publish a dashboard on the Enforcement Compliance History Online website that shows trends in Agency-led enforcement activities and actions and is similar to the dashboards that the Agency has already prepared for state enforcement programs.

## Agency Response and OIG Assessment

The Agency provided an official response to the draft report and technical comments on March 26, 2021 (Appendix E). The Agency agreed with Recommendations 6 and 8 and provided corrective actions that meet the intent of our recommendations. For Recommendation 6, the Agency proposed conducting an evaluation of OECA performance measures, including those for compliance assistance and informal enforcement actions, upon issuance of the Agency's new strategic plan. For Recommendation 8, the Agency proposed changing the name of the state dashboards to EPA/state dashboards to clarify that these media-specific dashboards also include data about EPA enforcement activities.

The audit team met with OECA staff and managers on April 7, 2021, to discuss the Agency's response to Recommendations 4, 5, and 7 and the proposed high-level intended corrective actions for these recommendations. As a result of that

meeting, we made a minor revision to Recommendation 7 and the Agency provided revised high-level corrective actions to supplement its original response for Recommendations 4, 5, and 7 (Appendix F) on April 13, 2021.

The Agency agreed with Recommendation 4 and provided in its April 13, 2021 response corrective actions that meet the intent of our recommendation. OECA generally agreed that providing additional contextual information regarding its enforcement results could be beneficial for public understanding of the Agency's activities and their impact but raised concerns about the level of effort needed to fulfill this recommendation. OECA specifically noted that information on the complexity of compliance monitoring activities or cleanups is subjective. OECA also wrote that categorizing pollutants by their severity or risk is challenging and may ultimately confuse or mislead the public.

While the Agency agreed with Recommendation 5, the corrective actions proposed in its April 13, 2021 response do not meet the intent of this recommendation. OECA noted in its March 26, 2021 response that compliance assistance and informal enforcement were both compliance assurance tools of interest to the prior administration. OECA further stated that, while it had tracked compliance assistance for many years, it was unable to measure the impact on compliance or to gauge the benefit of the effort and ultimately eliminated the requirement to track these activities. The Agency proposed defining informal enforcement actions and developing reporting instructions based on those definitions, which are important steps to establishing measures for these activities. However, regardless of whether compliance assistance and informal enforcement are priorities of the prior administration, for the current administration, or future administrations, this work is part of the Agency's enforcement program, and the Agency should track and report on these activities. In addition, the GAO recommended that the Agency collect data on these types of activities in January 2020.

The Agency agreed with Recommendation 7 and provided a corrective action that meets the intent of this recommendation in its April 13, 2021 response. In its March 26, 2021 response, OECA agreed with the value of tracking noncompliance rates within environmental programs and stated that demonstrating positive change in the rate of compliance would be the ideal measure of program effectiveness. OECA added that deriving compliance rates and determining whether Agency actions produce compliance are expensive, divert limited resources, and ultimately are not achievable with data available at this time. OECA stated that the CWA National Pollutant Discharge Elimination System, or NPDES, program is one area in which the Agency can calculate compliance rates based on self-reported effluent data. The Agency emphasized that it is committed to using compliance rates to measure and improve compliance and program performance when possible. The Agency should continue its work planned for improving noncompliance in the NPDES program and extending those lessons learned to the SDWA program. We recognize the structural and

resource barriers that exist to developing noncompliance rates, which have also been findings in prior OIG reports. Using evidence-based compliance research to study the impacts of compliance assurance tools on the regulated community will provide the Agency with information about the effectiveness of enforcement tools and a foundation for enforcement policies and procedures.

Based on the technical comments, we changed the report where appropriate.

# **Status of Recommendations and Potential Monetary Benefits**

## RECOMMENDATIONS

Rec. No.	Page No.	Subject	Status <sup>1</sup>	Action Official	Planned Completion Date	Potential Monetary Benefits (in \$000s)
1	42	Assess the needs of the Agency's enforcement program by completing a workforce analysis to determine the level of staffing necessary to achieve and maintain a strong enforcement presence in the field that protects human health and the environment.	U	Assistant Administrator for Enforcement and Compliance Assurance		
2	42	Integrate the results of the workforce analysis into the Office of Enforcement and Compliance Assurance's annual and strategic planning processes.	U	Assistant Administrator for Enforcement and Compliance Assurance		
3	42	Use the results of the Office of Inspector General's <i>2019 Enforcement Survey</i> and other resources to identify and address areas of concern for the enforcement program, including through issuing new or revised policies, as appropriate.	R	Assistant Administrator for Enforcement and Compliance Assurance	9/30/21	
4	54	Incorporate additional enforcement information and data into future annual enforcement results reports to provide context for (a) compliance monitoring activities conducted by the Agency and (b) the estimated environmental benefits achieved through Agency enforcement actions.	R	Assistant Administrator for Enforcement and Compliance Assurance	3/31/22	
5	54	Establish additional measures for Agency-led compliance assistance activities and informal enforcement actions and include these new measures in future annual enforcement results reports with the appropriate context.	U	Assistant Administrator for Enforcement and Compliance Assurance		
6	54	Evaluate the annual enforcement performance measures to assess whether additional context should be provided for other reported measures or whether additional measures should be included in future reports to fully capture the scope of the Agency's enforcement program.	R	Assistant Administrator for Enforcement and Compliance Assurance	2/28/22	
7	54	Develop and track noncompliance rates within environmental programs or use other innovative approaches that would indicate the success of enforcement activities at returning entities to compliance.	R	Assistant Administrator for Enforcement and Compliance Assurance	6/30/22	
8	54	Develop and publish a dashboard on the Enforcement Compliance History Online website that shows trends in Agency-led enforcement activities and actions and is similar to the dashboards that the Agency has already prepared for state enforcement programs.	R	Assistant Administrator for Enforcement and Compliance Assurance	5/31/21	

<sup>1</sup> C = Corrective action completed.  
R = Recommendation resolved with corrective action pending.  
U = Recommendation unresolved with resolution efforts in progress.

## ***2019 OIG Survey of EPA Enforcement Personnel: Methodology and Results***

We administered a survey to all enforcement personnel who were employed in September 2019 to gather input on the key factors that affected enforcement trends over time. We received 911 responses from EPA employees working in enforcement, an approximate 37-percent response rate. In this appendix, we present the results of our analysis for all close-ended questions and key themes from our analysis of open-ended questions. Generally, we saw that enforcement personnel had similar levels of agreement and disagreement about survey statements for the first two time periods (2006–2008 and 2009–2016). However, they had noticeably different levels of agreement for the same survey statements in the last time period (2017–2018). Based on survey results, we identified three areas of concern that the Agency may need to address in response to Recommendation 3, which were perceived:

- Overdeference to state enforcement programs.
- Hindrance of enforcement activities by policies in place at that time.
- Decreases in support from regional and national leadership during the administration at that time.

### **Survey Methodology**

In September 2019, we administered an online survey to all (2,462) EPA enforcement personnel—staff, managers, and officials—to gather input on the key factors that affected enforcement trends. The survey solicited personnel perceptions on inspections, case initiations and conclusions, enforcement results, data quality and data systems, and integrity of the enforcement program for three time periods: 2006–2008, 2009–2016, and 2017–2018.

Prior to sending the survey instrument to enforcement personnel, we sought feedback from EPA enforcement managers on the scope and phrasing of the survey questions and incorporated that feedback where appropriate. We developed the list of survey recipients in conjunction with the Agency from names included in existing email groups for OECA, regional enforcement divisions, and inspectors. We deployed the online survey on September 9, 2019, and allowed respondents two weeks to complete their survey—through September 23, 2019. On an individual basis, we subsequently provided access to the survey for enforcement personnel that were mistakenly not on our recipient list or for those that had left enforcement programs for other Agency offices.

We also sought input from former enforcement personnel. As part of that effort, we sent the survey to two nongovernmental organizations known to have members that are former EPA employees. We received and analyzed approximately 100 responses from self-identified former enforcement personnel, but we did not include these in our analysis of close-ended questions.

We received 911 responses from employees working in enforcement, an approximate 37-percent response rate. We did not collect names of respondents nor did we attempt to identify respondents. Some respondents provided their contact information and asked us to follow up with them to discuss their survey responses, which we accomplished through interviews. We collated, cleaned, and analyzed the responses. Our team analyzed responses to free-response, or open-ended, questions by coding each comment into bins that represented key themes we identified in the responses to the questions. We coded some comments into multiple bins. We describe the key themes for each question in this appendix and highlight specific comments that represented the most common themes in green boxes throughout this report. We included former EPA enforcement staff in the data set in which we coded comments.

## Survey Results

We present the results of our analysis of survey responses in the same sequence as questions appeared in the survey under the following five sections:

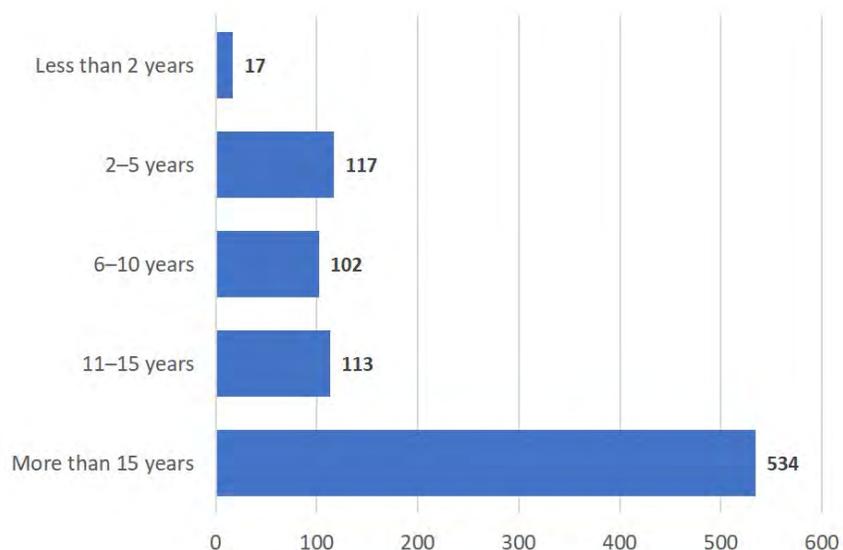
- Demographics (see Figures A-1 through A-5 and Tables A-1 and A-2).
- Inspections (see Figures A-6 through A-13).
- Case development (see Figures A-14 through A-21).
- Case follow-up (see Figures A-22 through A-24).
- Program results and integrity (see Figures A-24 through A-27).

The online survey skipped the inspections, case development, and case follow-up sections if the respondents answered that they had not completed or managed those activities. Respondents were only asked for their perspectives on the time frames in which they began working in enforcement at the EPA and any time frames afterward. On each figure, we indicated the number of respondents to each question using a lowercase “n.” Most survey questions asked respondents to indicate their level of agreement with a particular statement. We color-coded figures in which expressing strong agreement or strong disagreement had clear positive or negative connotations using a red-yellow-green scale. We represented answers to other statements that did not have clear associations with particular answers with a monochromatic blue scale.

We labeled the following figures with the text from the associated survey question.

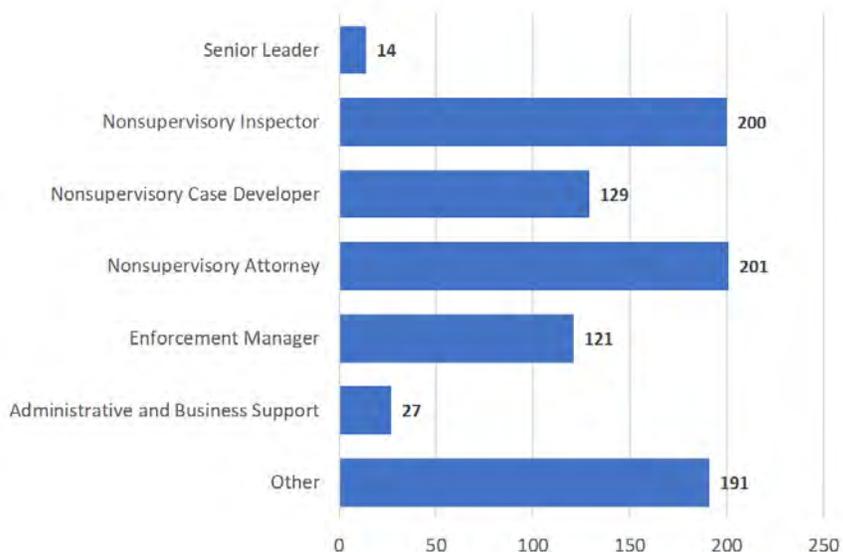
## Demographics

**Figure A-1: How long have you worked at the EPA? (n = 883)**



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

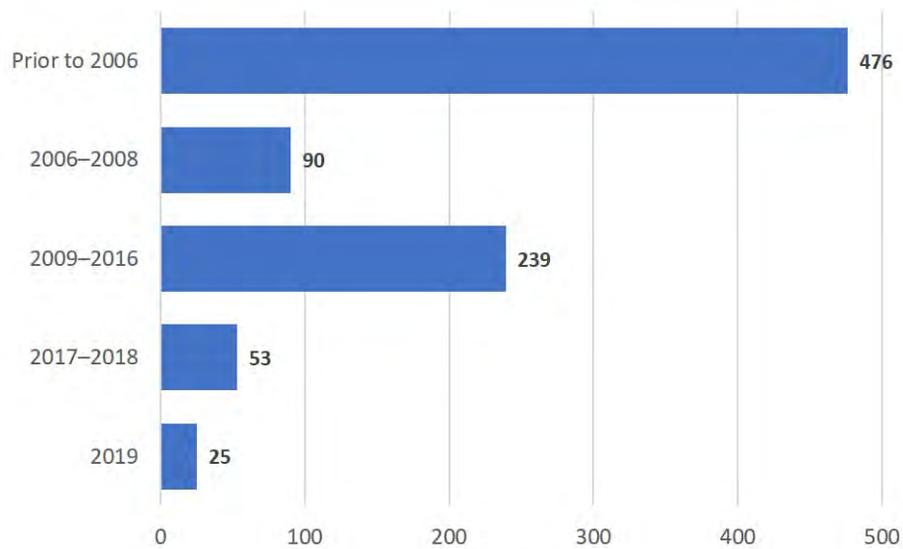
**Figure A-2: What is your current enforcement role? (n = 883)**



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

Based on comments provided by survey respondents, the most common role for those that selected “other” was inspector **and** case developer (28 percent), followed by specialty experts (12 percent) and nonsupervisory inspectors (9 percent).

**Figure A-3: During which time frame did you begin working on environmental enforcement at the EPA? (n = 883)**



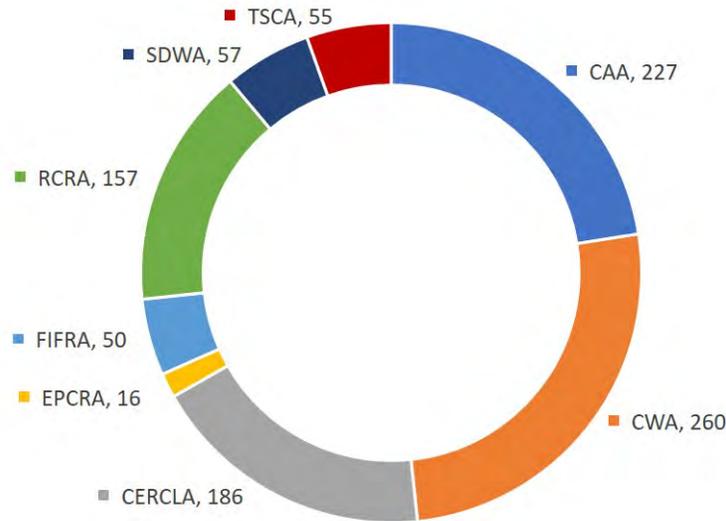
Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

**Table A-1: Under which statute did your environmental enforcement work primarily fall?**

	Prior to 2006 (n = 539)	2006-2008 (n = 539)	2009-2016 (n = 771)	2017-2018 (n = 733)	2019 (n = 733)
<b>CAA</b>	85	92	159	150	147
<b>CWA</b>	92	122	197	163	162
<b>CERCLA</b>	119	116	130	127	123
<b>EPCRA</b>	6	5	6	7	9
<b>FIFRA</b>	24	24	31	33	30
<b>RCRA</b>	76	80	106	89	86
<b>SDWA</b>	21	21	29	36	36
<b>TSCA</b>	16	17	31	34	34
<b>None</b>	70	17	23	34	43
<b>Other</b>	30	45	59	60	63

Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG table)

**Figure A-4: Number of respondents that selected given statutes for any time period**



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

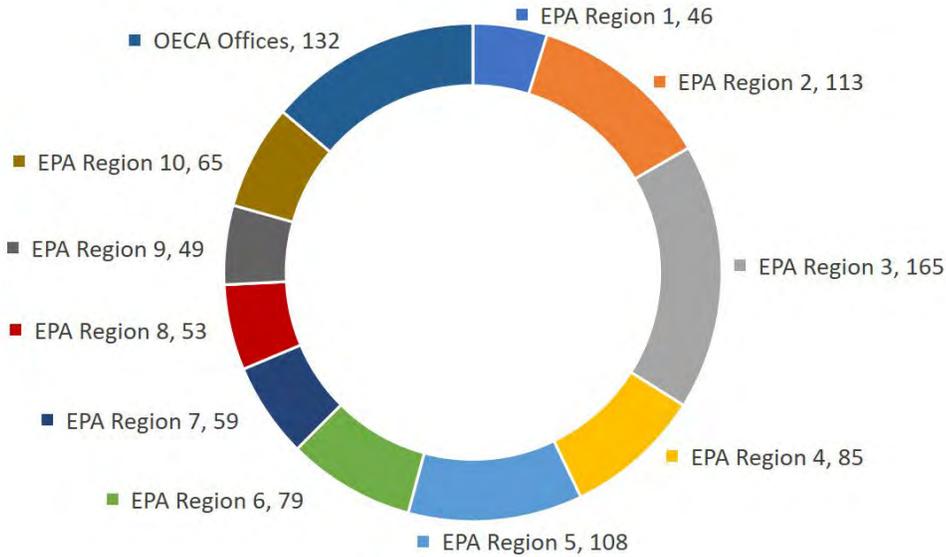
Note: This figure does not reflect the sum of the subtotals presented in Table A-1 because we counted an employee that worked in the same statute for multiple time periods only once.

**Table A-2: In which office or EPA region did you primarily work?**

	Prior to 2006 (n = 482)	2006–2008 (n = 531)	2009–2016 (n = 762)	2017–2018 (n = 810)	2019 (n = 829)
<b>Region 1</b>	28	29	37	42	46
<b>Region 2</b>	70	77	99	108	110
<b>Region 3</b>	58	64	82	86	88
<b>Region 4</b>	47	53	68	79	82
<b>Region 5</b>	69	71	100	96	94
<b>Region 6</b>	42	45	74	74	74
<b>Region 7</b>	25	30	47	56	57
<b>Region 8</b>	19	21	40	47	50
<b>Region 9</b>	25	25	43	43	44
<b>Region 10</b>	29	31	54	60	62
<b>OECA</b>	65	78	109	113	116
<b>Other</b>	5	7	9	6	6

Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG table)

**Figure A-5: Number of respondents that selected given office or region for any time period**

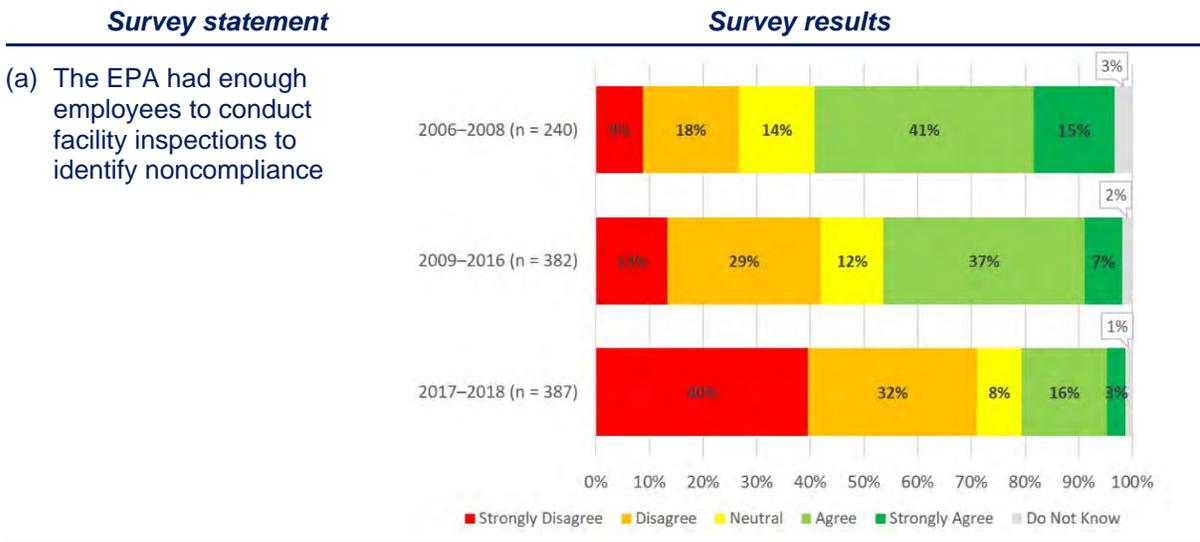


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

Note: This figure does not reflect the sum of the subtotals presented in Table A-2 because we count an employee that worked in the same office or region for multiple time periods only once.

**Inspections**

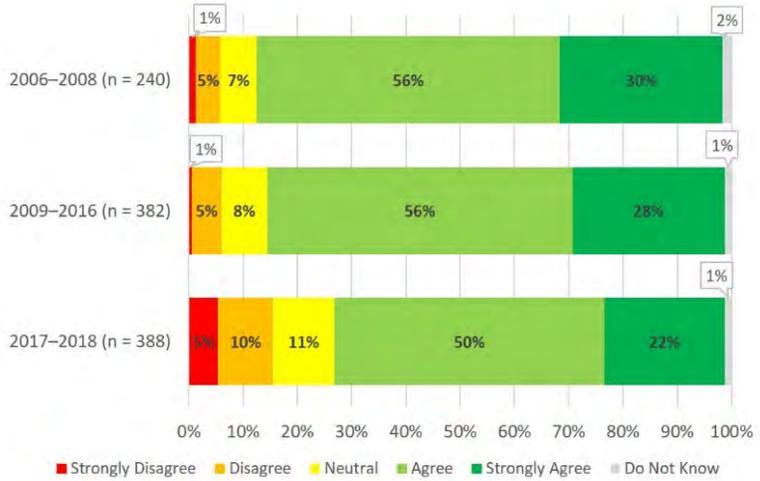
**Figure A-6: How much do you agree or disagree with the following statements about inspection resources related to your focus area?**



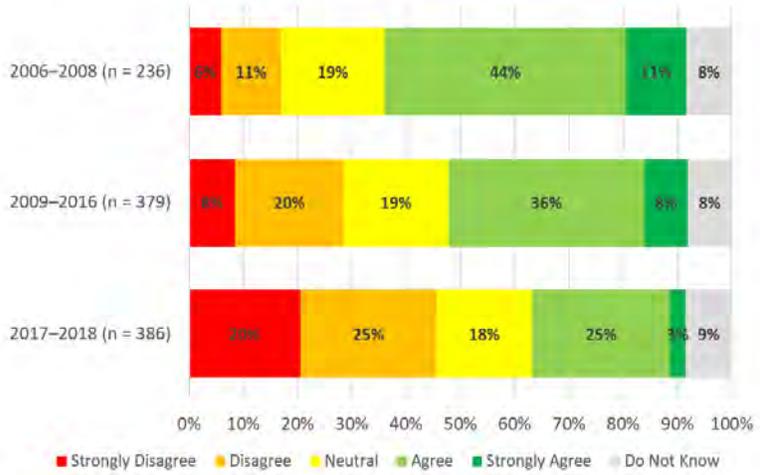
**Survey statement**

**Survey results**

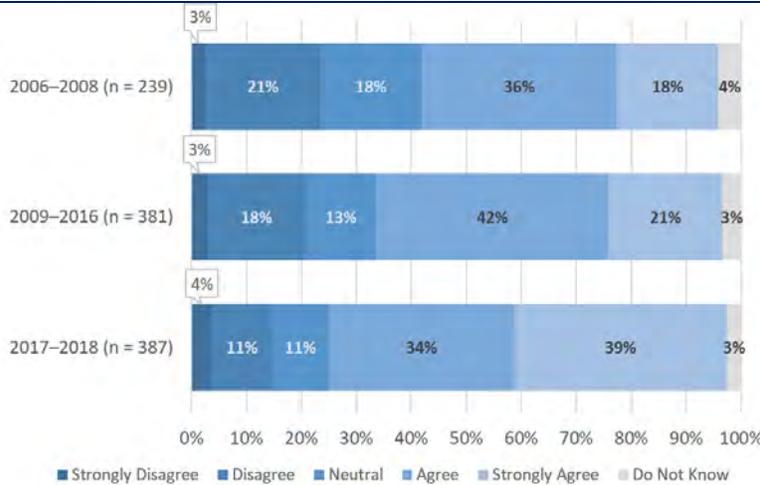
(b) EPA inspectors had the technical expertise to identify noncompliance

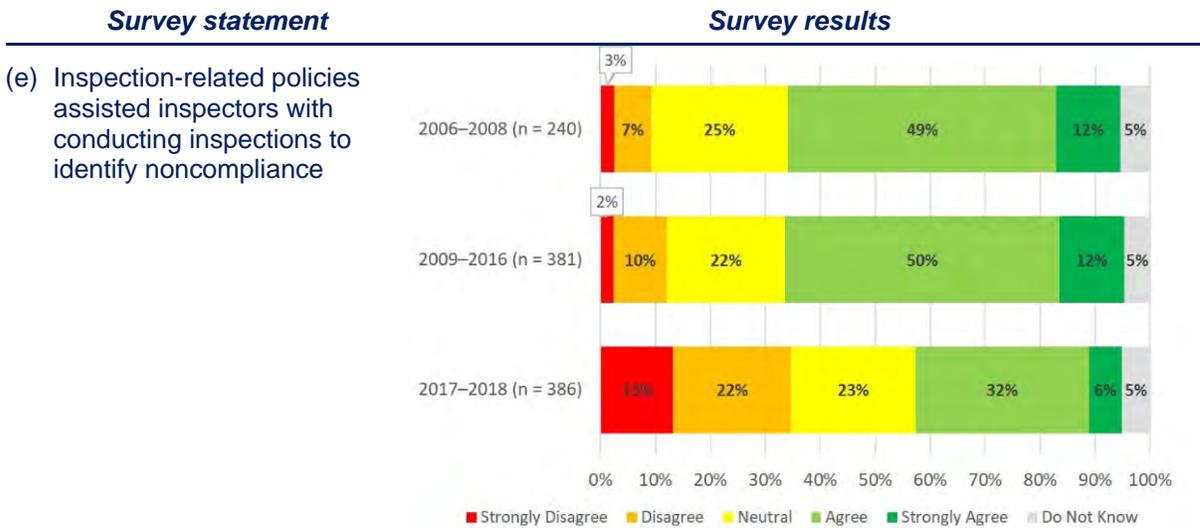


(c) Sufficient funds were available to assist with conducting high-quality EPA-led inspections (for example, renting equipment and contracting inspection services)



(d) Availability of resources (staff, budget, and so on) impacted the EPA's ability to conduct inspections





Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

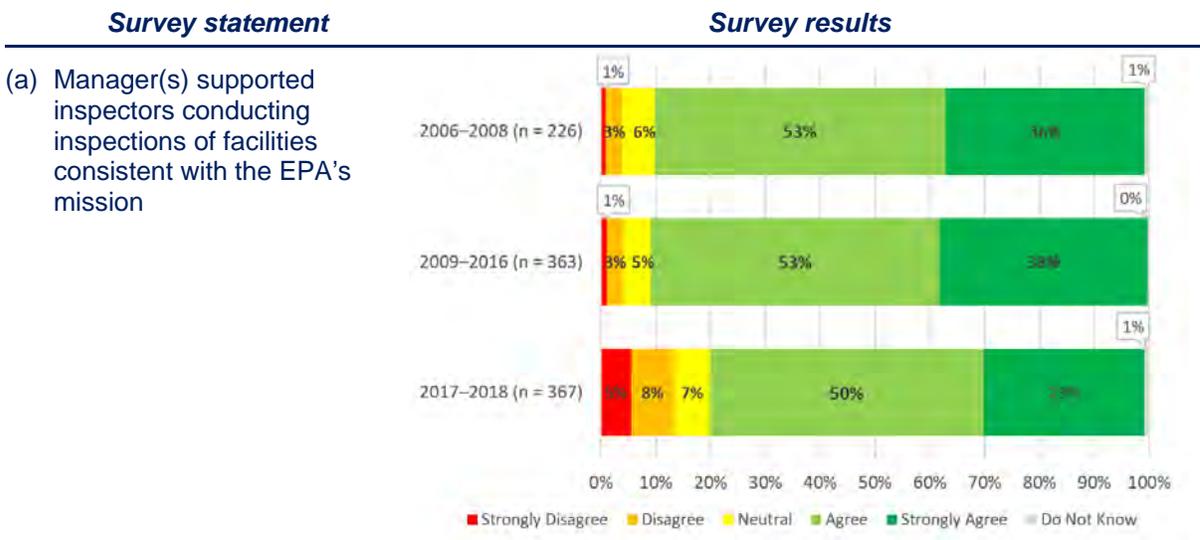
**Key Themes from Comments About Inspection Resources**

Survey respondents provided 186 comments about the availability of inspection resources in their focus areas. Respondents most frequently described negative impacts:

- On the EPA’s capacity to conduct adequate compliance monitoring.
- From the Agency assigning additional noninspection duties to inspectors.
- From political influence or national OECA policies.

**Figure A-7: How much do you agree or disagree with the following statements about your manager’s (or managers’) support of inspection work related to your focus area?**

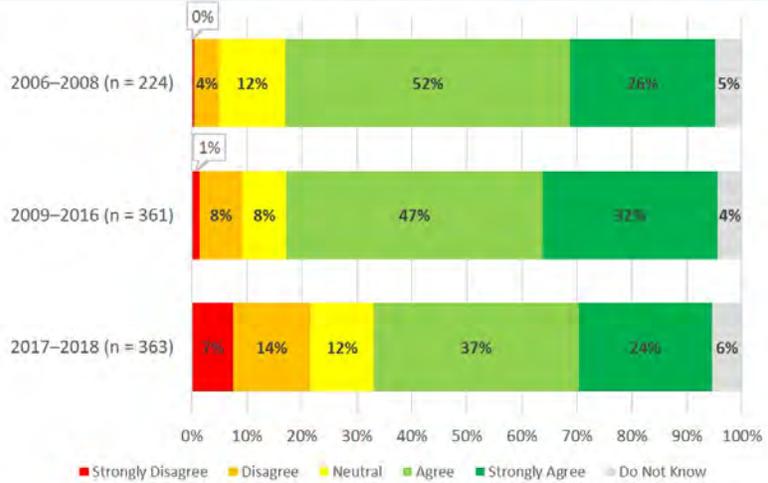
A *manager* is a first-line supervisor or someone in a management position; it does not include senior leadership.



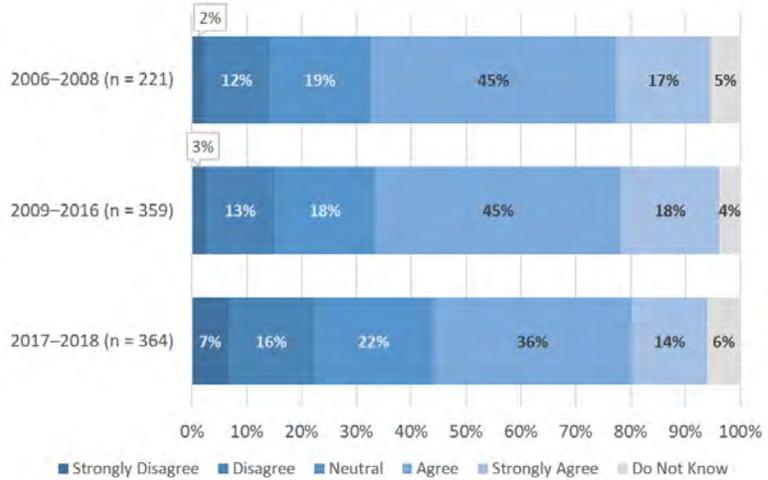
**Survey statement**

**Survey results**

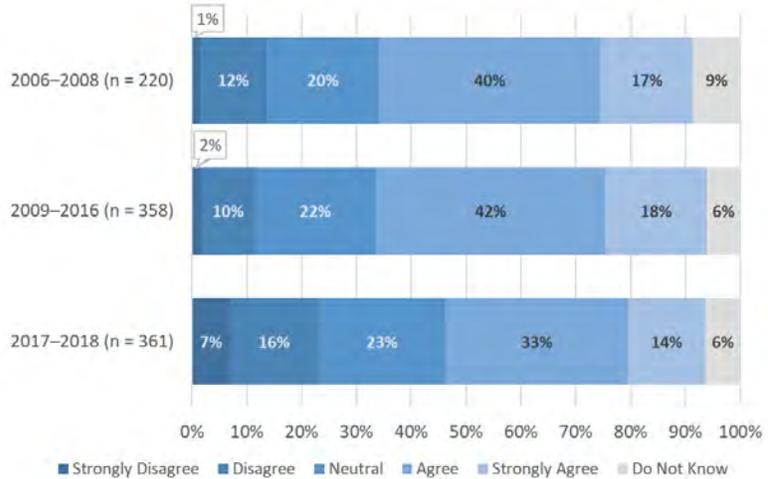
(b) Manager(s) supported inspectors conducting inspections at facilities in all relevant industry sectors



(c) Manager(s) prioritized conducting routine inspections



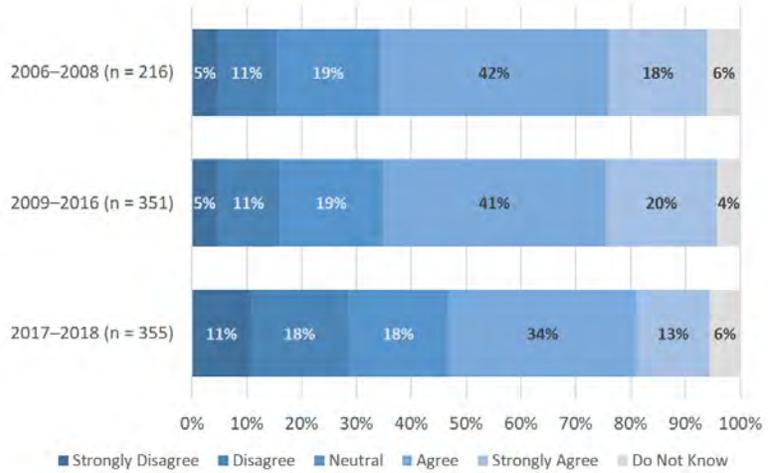
(d) Manager(s) prioritized conducting more complex inspections



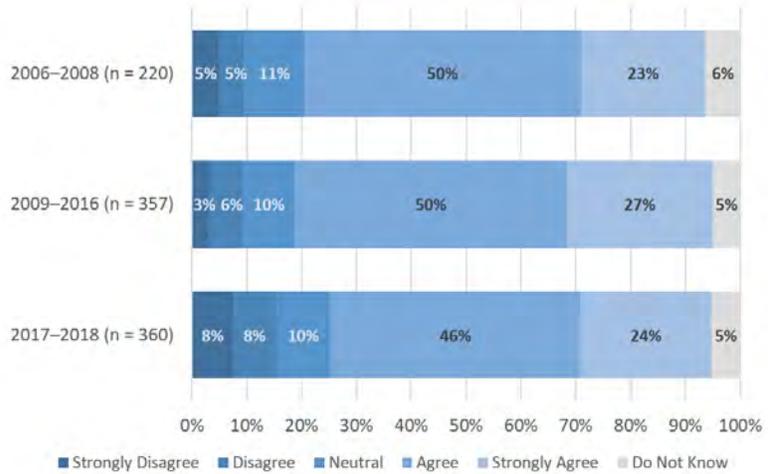
**Survey statement**

**Survey results**

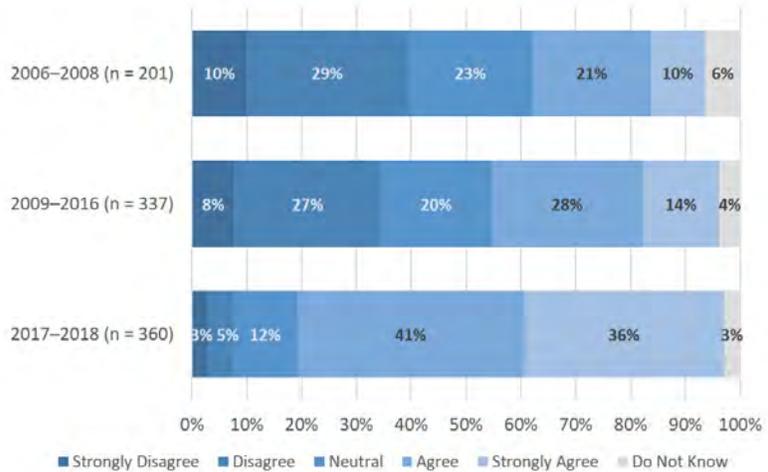
(e) Manager(s) supported conducting random inspections to identify facilities and/or industries with high noncompliance



(f) Manager(s) targeted (or supported staff who targeted) facilities and/or industries for inspections



(g) Manager(s) expected inspectors to strictly adhere to the 60-day inspection report turnaround time frame



**Survey statement**

**Survey results**

(h) Manager(s) supported inspectors' findings and conclusions



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About Managerial Support for Inspections**

Survey respondents provided 139 comments about their manager's or managers' support for their enforcement work. Some commenters expressed negative feelings about that support. However, many other commenters highlighted other issues that have impacted inspections, such as OECA policies, political influence, the 60-day inspection report requirement, or the support of senior personnel. Specific issues raised included the EPA's inspection capacity, a lack of support for inspecting specific sectors or under specific environmental statutes, and the prioritization of the quantity of inspections over their quality.

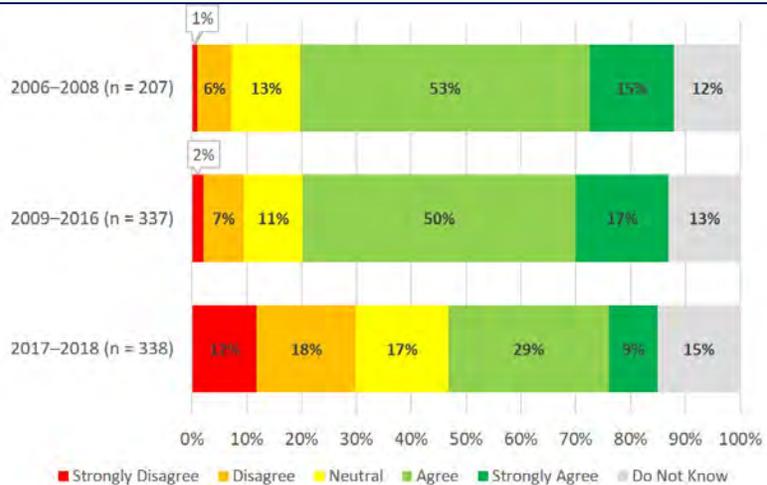
**Figure A-8: How much do you agree or disagree with the following statements about regional senior leadership support of inspection work related to your focus area?**

**Senior leader** is someone who is the head of a department or agency or a member of the immediate leadership team responsible for directing the policies and priorities of the department or agency. A senior leader may hold either a political or career appointment and typically is a member of the Senior Executive Service or equivalent.

**Survey statement**

**Survey results**

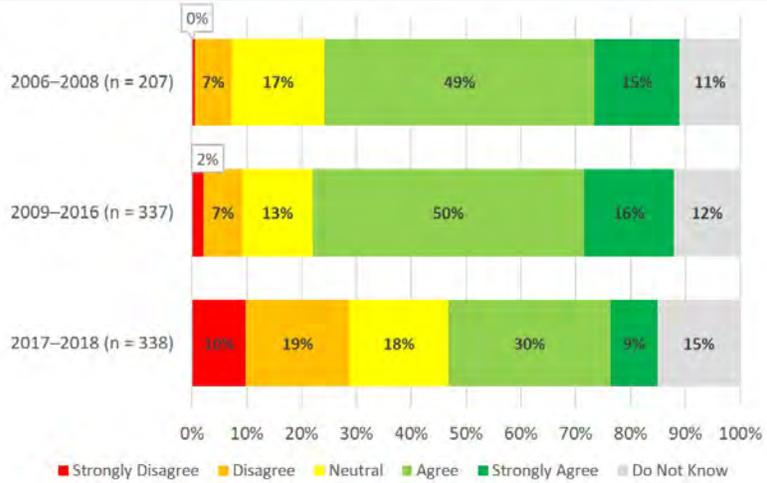
(a) Regional senior leadership supported inspectors conducting inspections of facilities across all regulated sectors



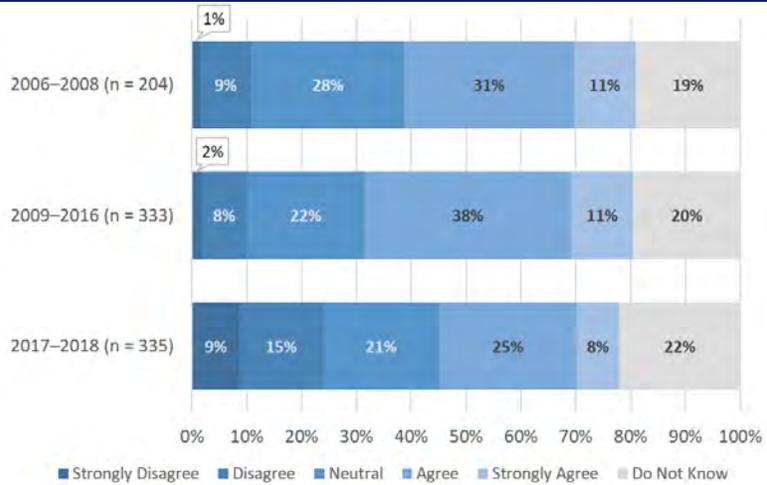
**Survey statement**

**Survey results**

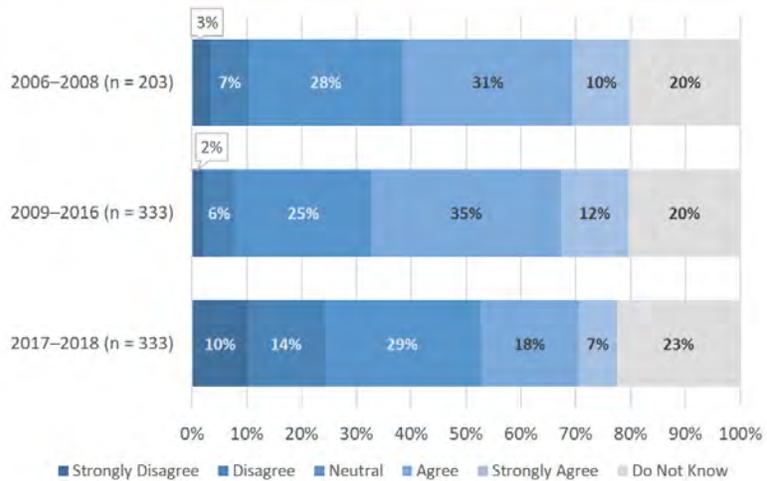
(b) Regional senior leadership supported inspectors conducting inspections at facilities in all relevant industry sectors



(c) Regional senior leadership prioritized conducting routine inspections



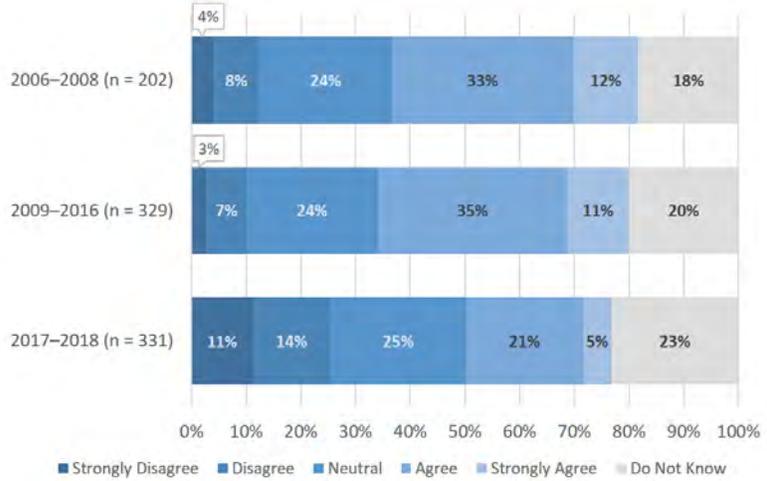
(d) Regional senior leadership prioritized conducting more complex inspections



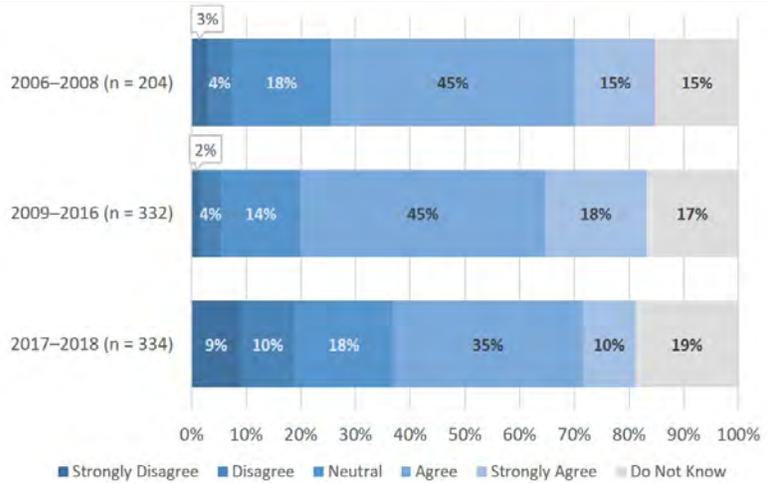
**Survey statement**

**Survey results**

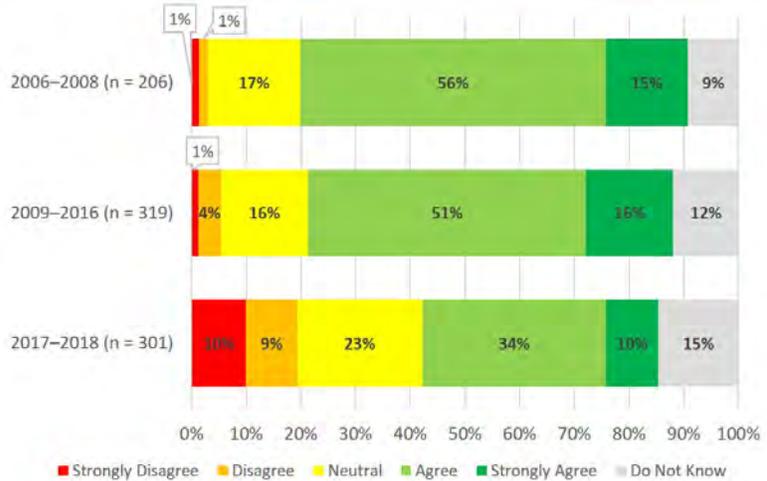
(e) Regional senior leadership supported conducting random inspections to identify facilities and/or industries with high noncompliance



(f) Regional senior leadership supported targeting facilities and/or industries with high noncompliance for inspections



(g) Regional senior leadership supported inspectors' findings and conclusions

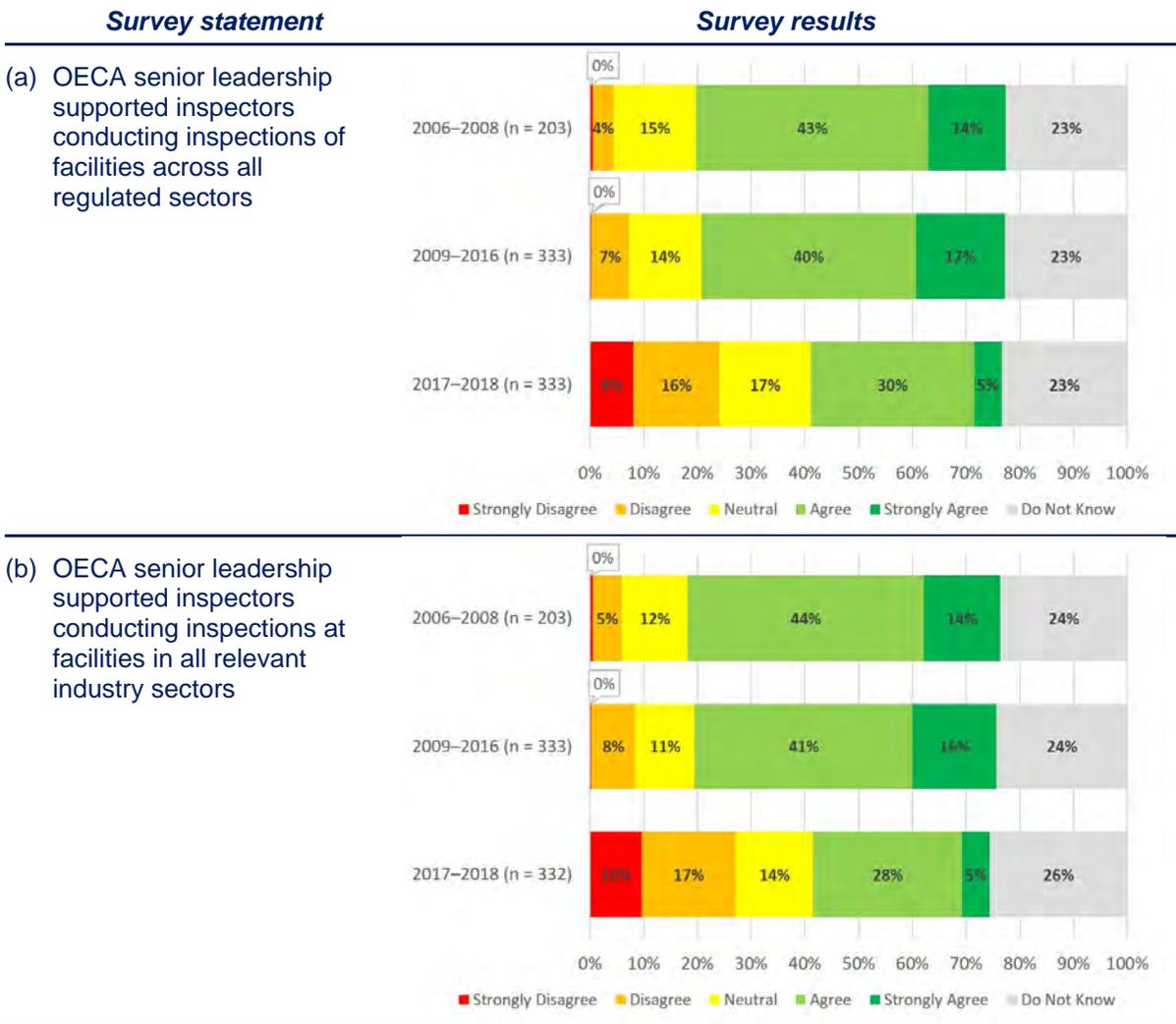


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About Regional Senior Leadership Support for Inspections**

Survey respondents provided 114 comments about regional senior leaders' support for inspection work in their focus area. The key theme from these comments was the negative impact of inadequate support for inspections from regional senior leaders, particularly for inspections in certain sectors or under certain environmental statutes. Many respondents also highlighted negative impacts from OECA policies or political influence on inspections.

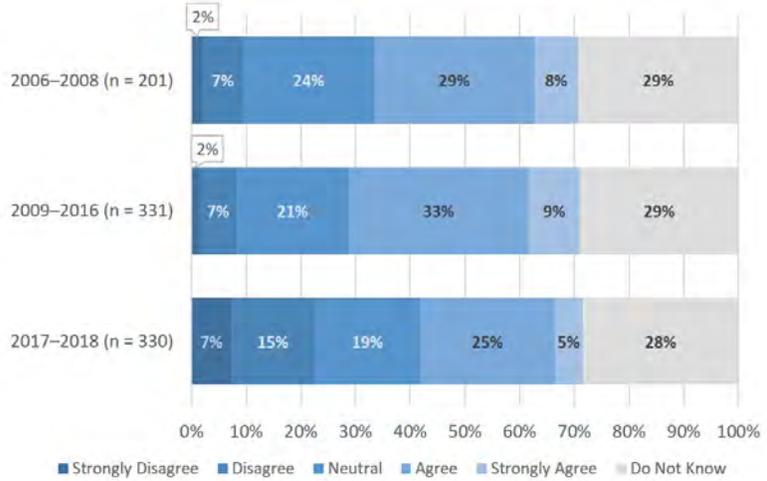
**Figure A-9: How much do you agree or disagree with the following statements about Office of Enforcement and Compliance Assurance's senior leadership support of inspection work related to your focus area?**



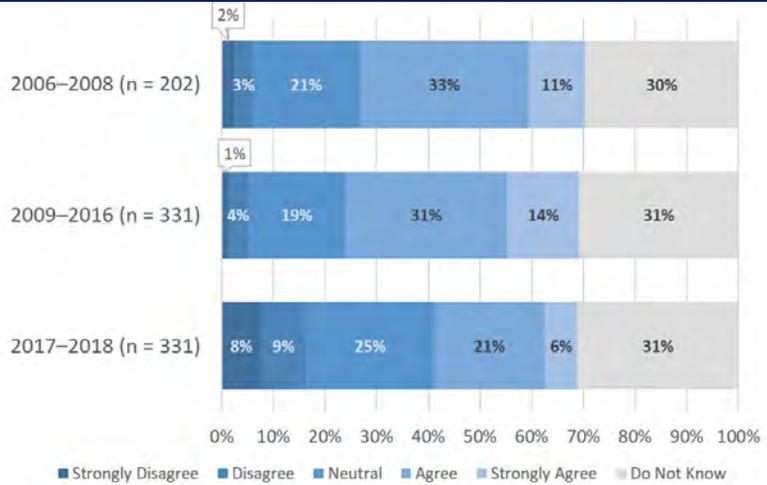
**Survey statement**

**Survey results**

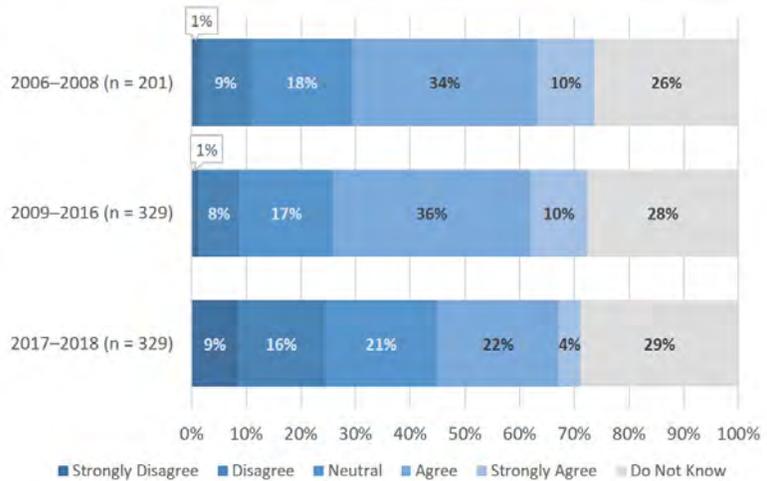
(c) OECA senior leadership prioritized conducting routine inspections



(d) OECA senior leadership prioritized conducting more complex inspections



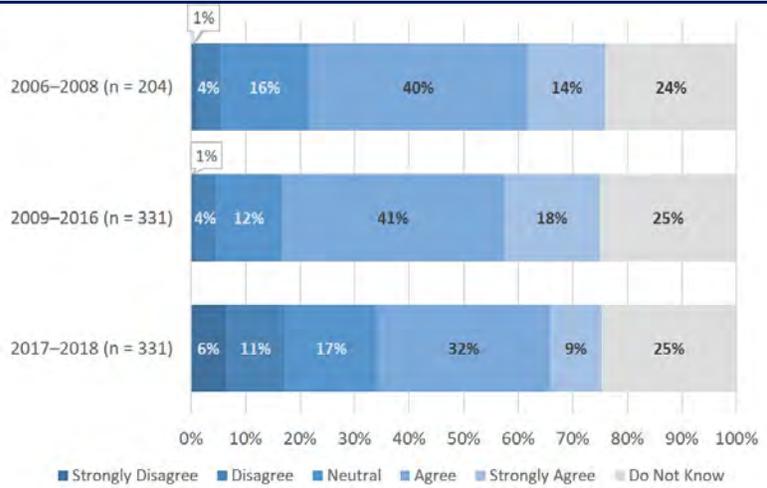
(e) OECA senior leadership supported conducting random inspections to identify facilities and/or industries with high noncompliance



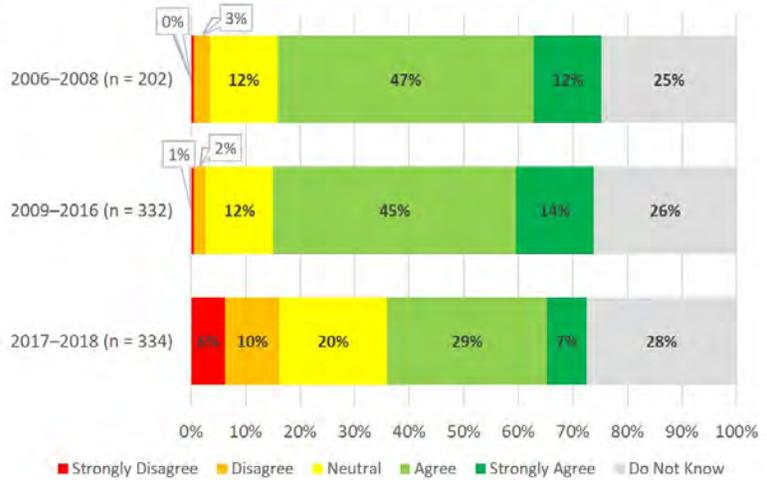
**Survey statement**

**Survey results**

(f) OECA senior leadership supported targeting facilities and/or industries with high noncompliance for inspections



(g) OECA senior leadership supported inspectors' findings and conclusions

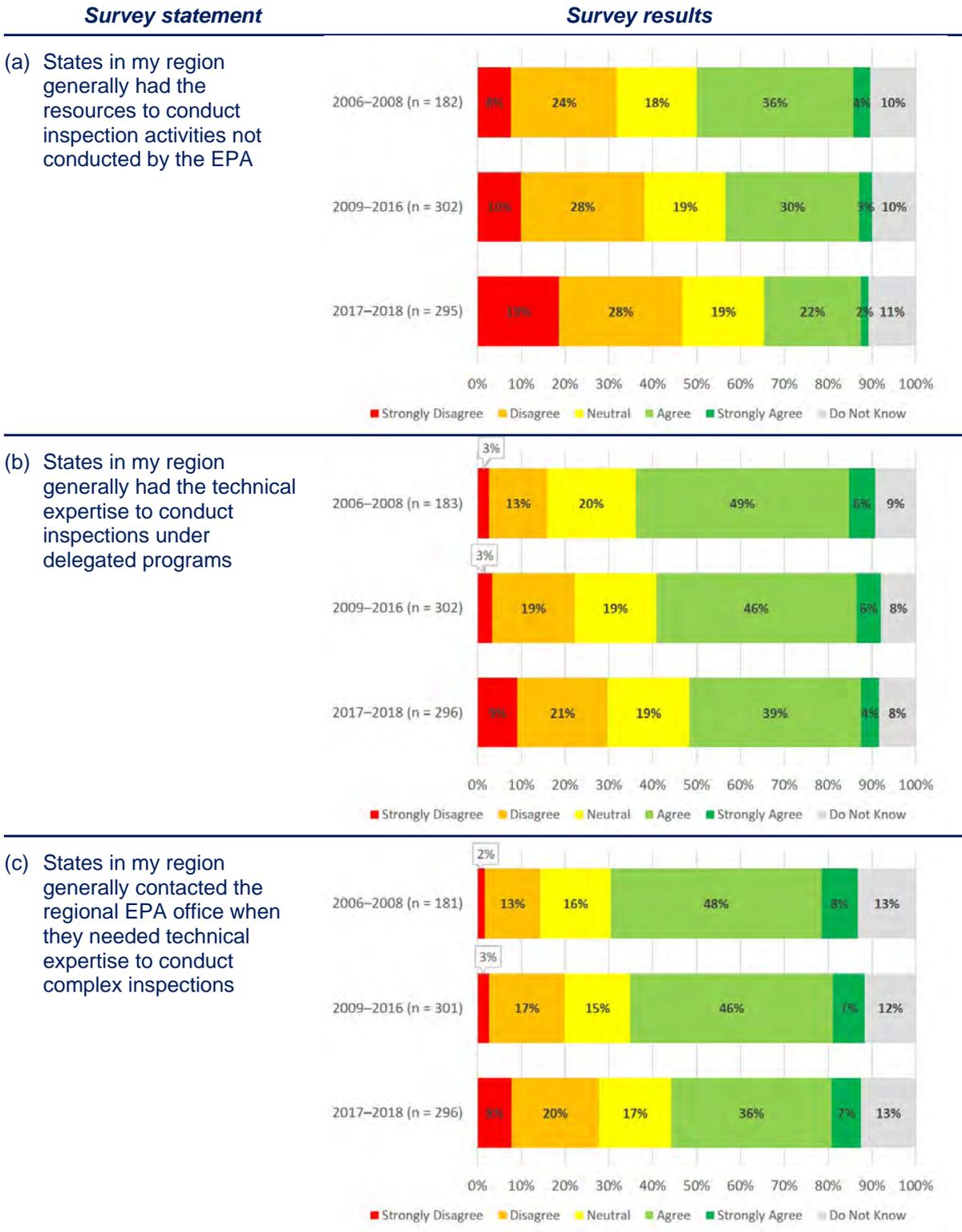


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About OECA Senior Leadership Support of Inspection Work**

Survey respondents provided 112 comments about support of inspection work from senior leaders within OECA. Many respondents expressed negative feelings about that support. Specific issues raised included a lack of support for inspecting specific sectors or under specific environmental statutes and negative impacts from OECA policy or political influence. Some comments did express support for OECA leadership, while others felt they did not know enough to gauge OECA's support for inspections.

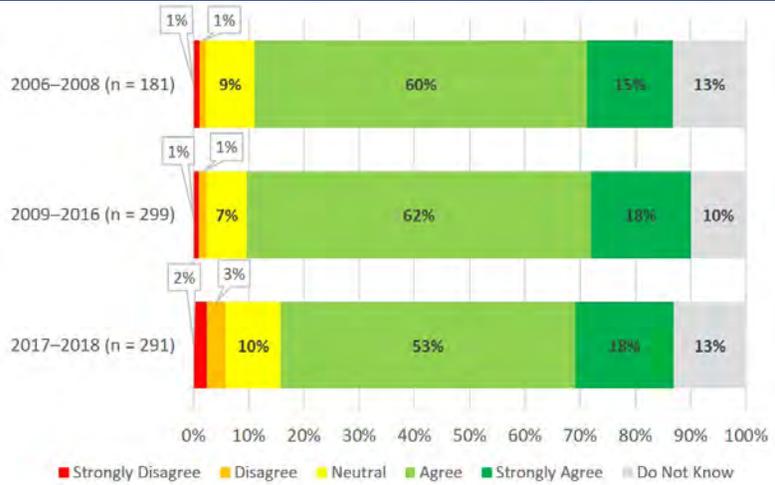
**Figure A-10: How much do you agree or disagree with the following statements about collaborating with states on inspections related to your focus area?**



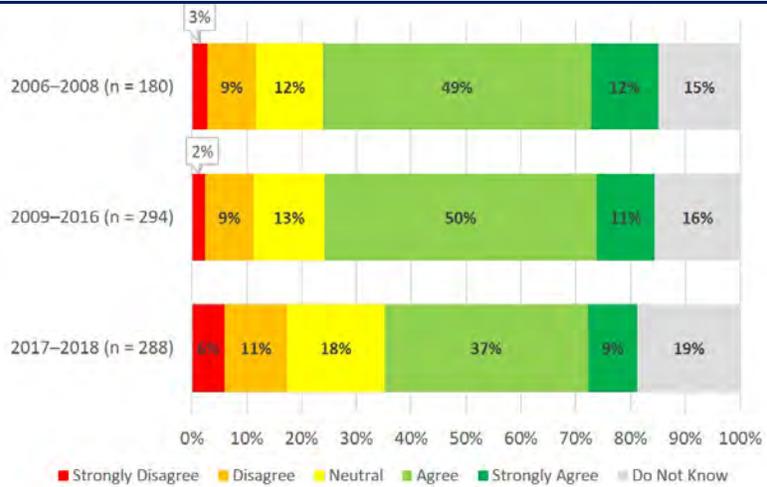
**Survey statement**

**Survey results**

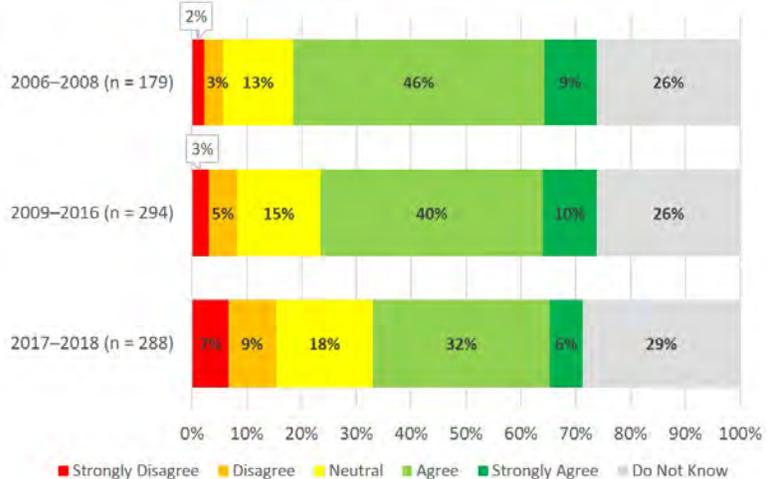
(d) When the EPA and states collaborated on inspections, a lead inspector was agreed upon in advance

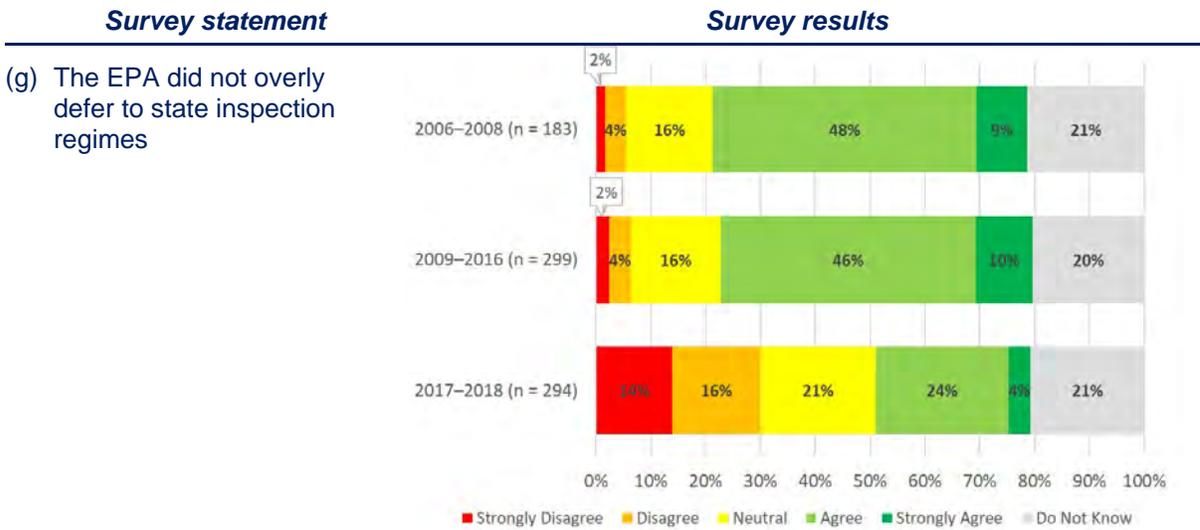


(e) The EPA monitored state inspection work to ensure that compliance monitoring met criteria



(f) The EPA held states accountable to their committed number of inspections and/or committed number of facility specific inspections



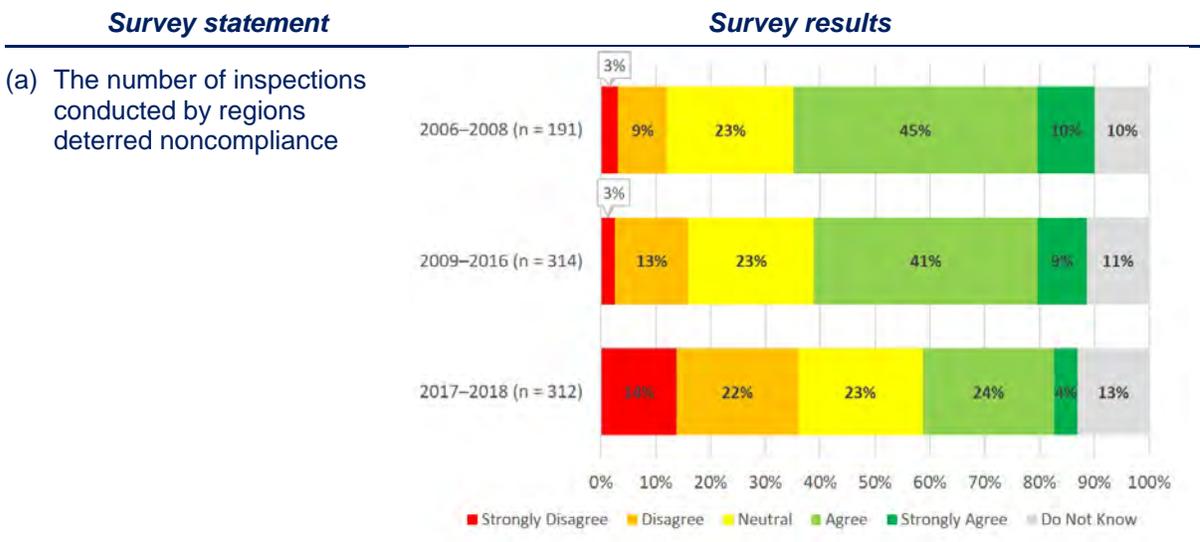


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About EPA-State Collaboration on Inspections**

Survey respondents provided 96 comments about collaborating with states on inspections in their focus area. Commenters most commonly described insufficient state enforcement program capacities overall, but many respondents also noted that state capacity varied from state to state. In addition, respondents commonly described a poorly functioning EPA-state relationship in terms of the Agency’s oversight of, support of, or collaboration with states. Those three classes of comments, when taken together, bolster the argument for strong federal oversight to ensure equitable protection for human health and the environment across the nation.

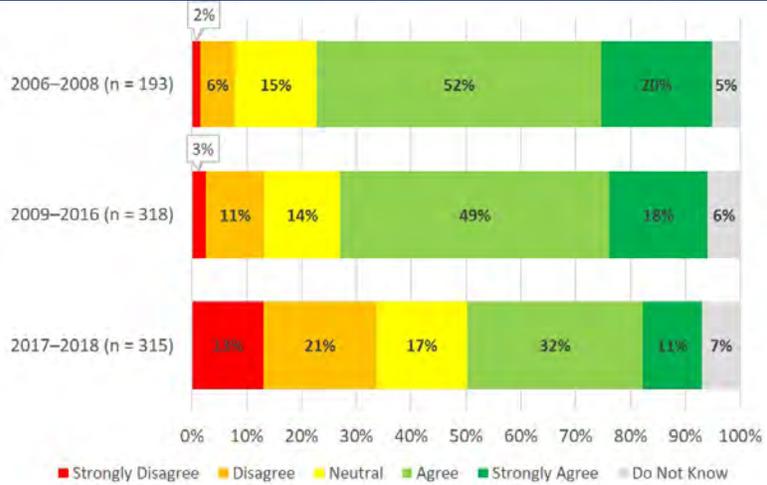
**Figure A-11: How much do you agree or disagree with the following statements about effectiveness of inspections related to your focus area?**



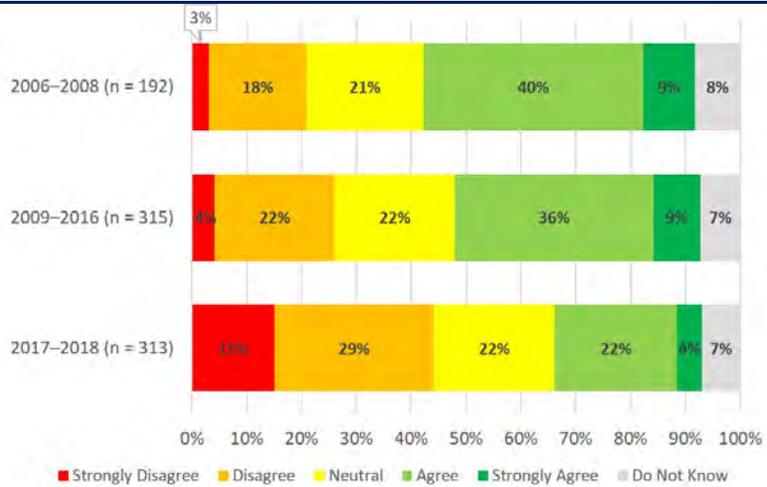
**Survey statement**

**Survey results**

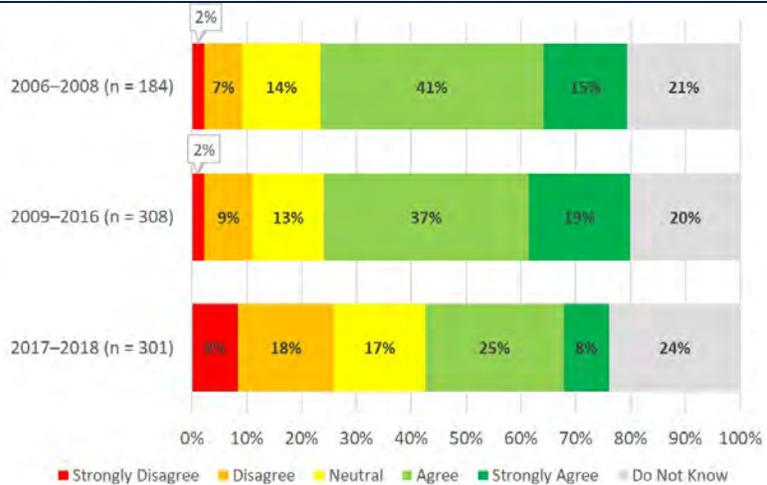
(b) The EPA's overall field presence encouraged compliance



(c) The EPA conducted adequate compliance monitoring



(d) Inspections conducted as part of a national enforcement initiative helped the Agency improve compliance in industry sectors with high rates of noncompliance that had significant impacts on human health or the environment

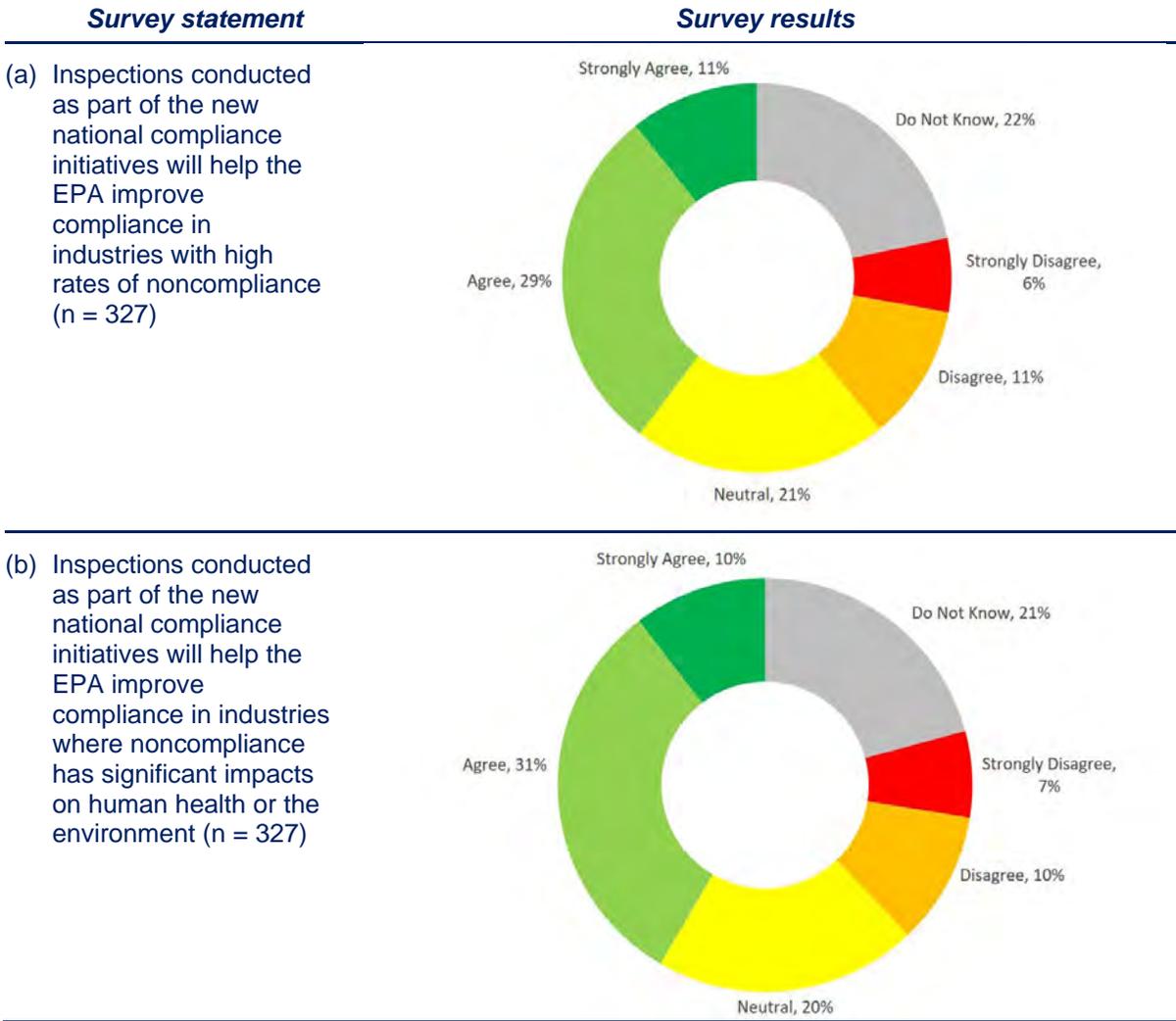


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Theme from Comments About the Effectiveness of Inspections**

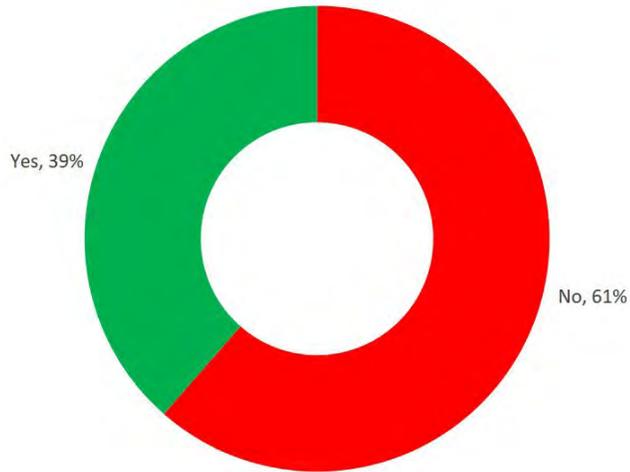
Survey respondents provided 105 comments about the effectiveness of inspections and most commonly noted a relative ineffectiveness of the overall inspection scheme because of inadequate EPA capacity or field presence.

**Figure A-12: How much do you agree or disagree with the following statements about national compliance initiatives?**



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Figure A-13: Does the current standard for completing inspection reports within 60 days allow for adequate documentation of inspections findings at complex facilities or involving complex legal requirements? (n = 332)**



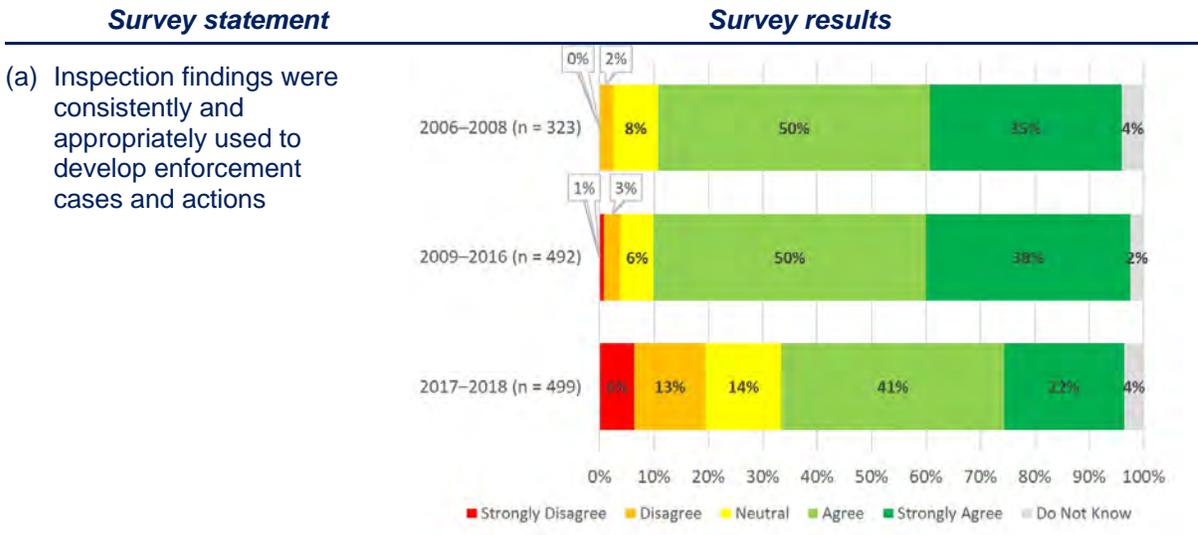
Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

**Key Theme from Comments About the Inspection Timeliness Standard**

Survey respondents provided 214 comments about the inspection timeliness standard. The key theme was that this requirement inhibits inspectors’ ability to write in-depth reports, particularly for complex inspections.

**Case Development**

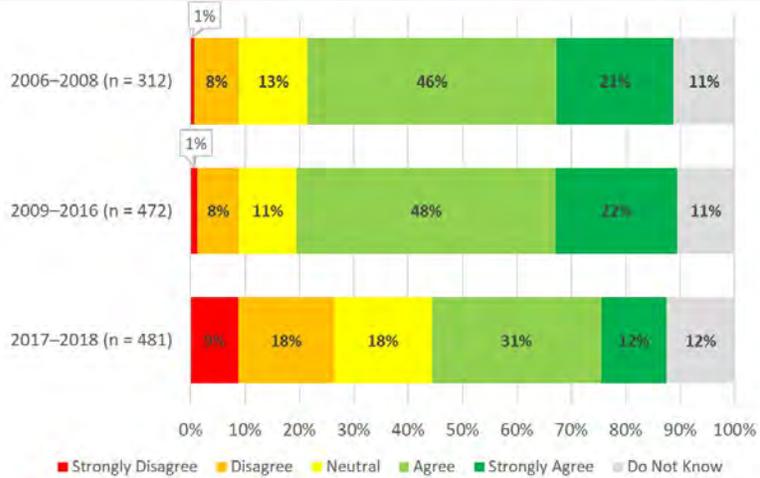
**Figure A-14: How much do you agree or disagree with the following statements about the use of inspection findings to develop enforcement cases in your focus area?**



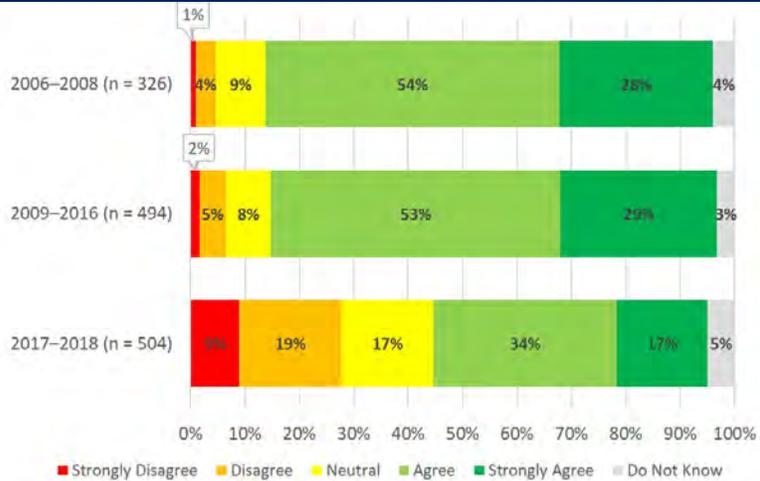
**Survey statement**

**Survey results**

(b) There were appropriate reasons when inspection findings were not used to develop EPA enforcement cases and actions



(c) The appropriate enforcement tools (e.g., formal enforcement, compliance assistance, etc.) were used to return facilities back to compliance



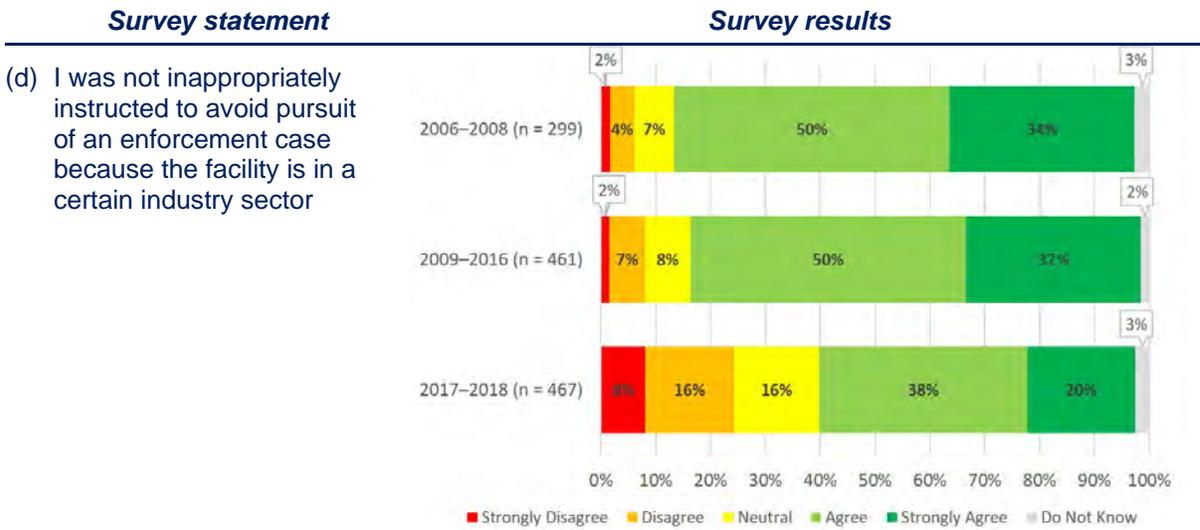
Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About the Use of Inspection Findings to Develop Enforcement Cases**

Survey respondents provided 152 comments about the use of inspection findings to develop enforcement cases. The key themes included that political considerations affected which cases are initiated following an inspection, that deference to states affected enforcement, and that inspection findings generally appropriately informed case development.

**Figure A-15: How much do you agree or disagree with the following statements about the development of enforcement cases in your focus area?**



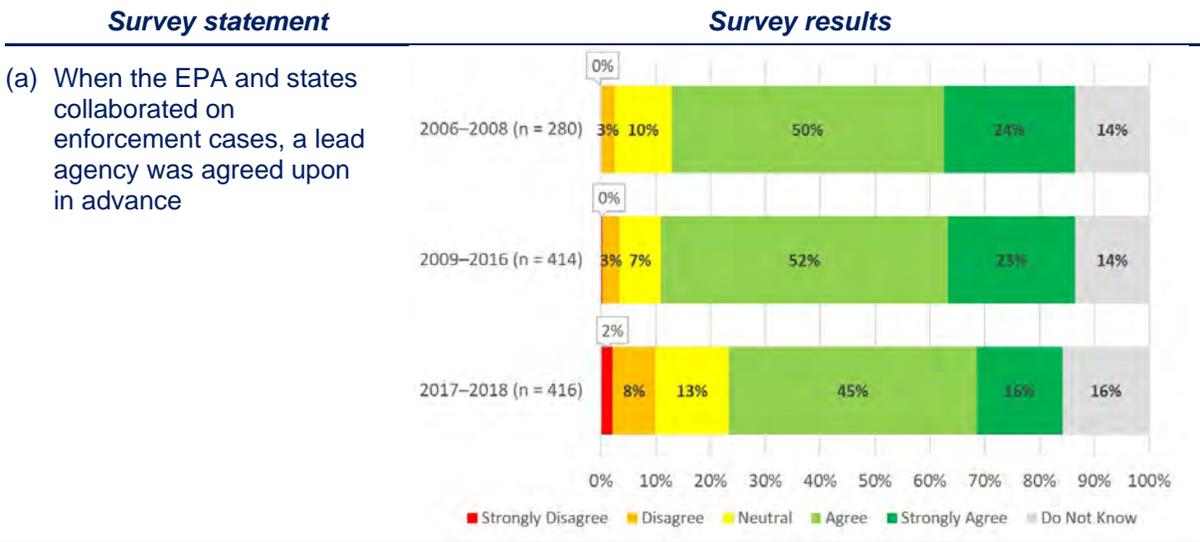


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About the Development of Enforcement Cases**

Survey respondents provided 177 comments about the development of enforcement cases. The key themes included that Agency policies and requirements slowed or made case development more difficult to accomplish, that enforcement against certain industries or sectors was discouraged, and that a lack of resources or trained personnel slowed case development.

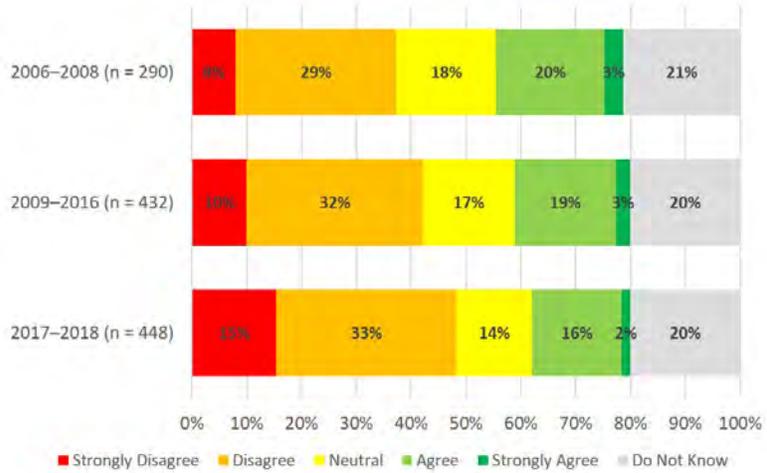
**Figure A-16: How much do you agree or disagree with the following statements about collaborating with states to develop and pursue enforcement cases in your focus area?**



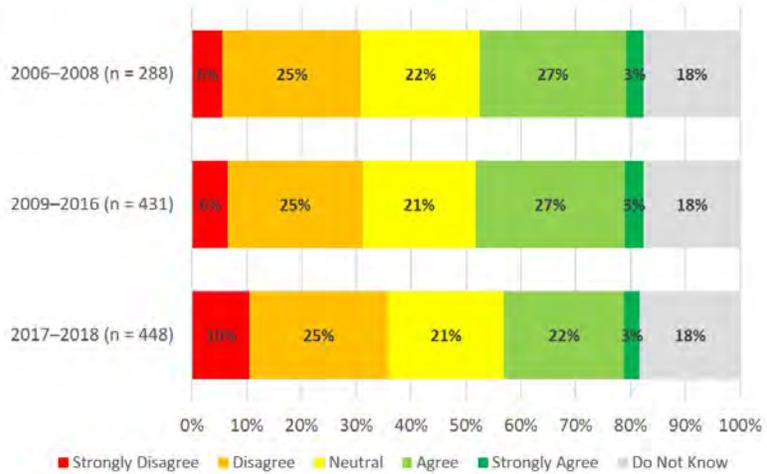
**Survey statement**

**Survey results**

(b) States had the resources to pursue additional enforcement cases not pursued by the EPA



(c) States had the technical expertise to pursue additional enforcement cases not pursued by the EPA



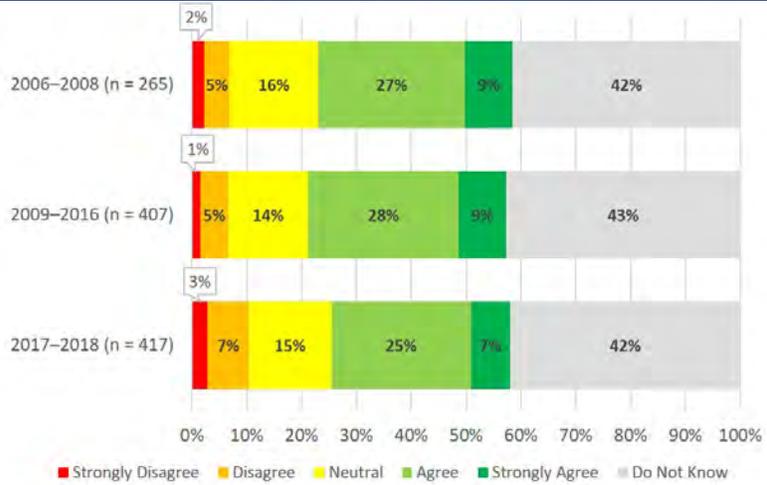
(d) States reached out to the regional EPA office when they needed assistance in pursuing enforcement cases



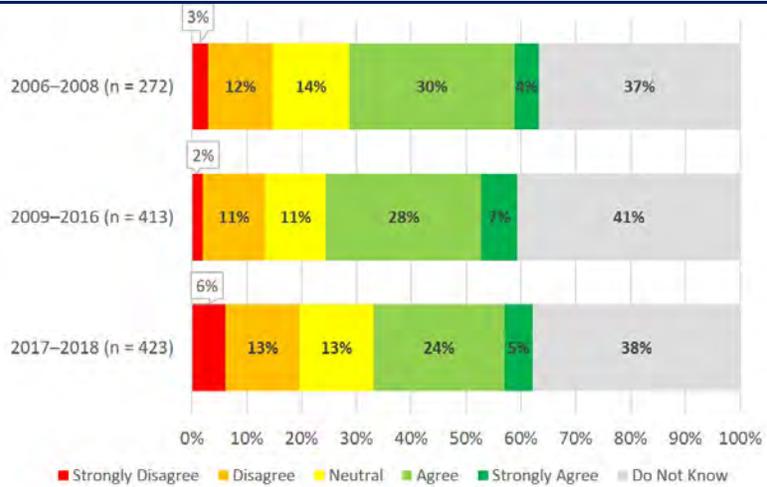
**Survey statement**

**Survey results**

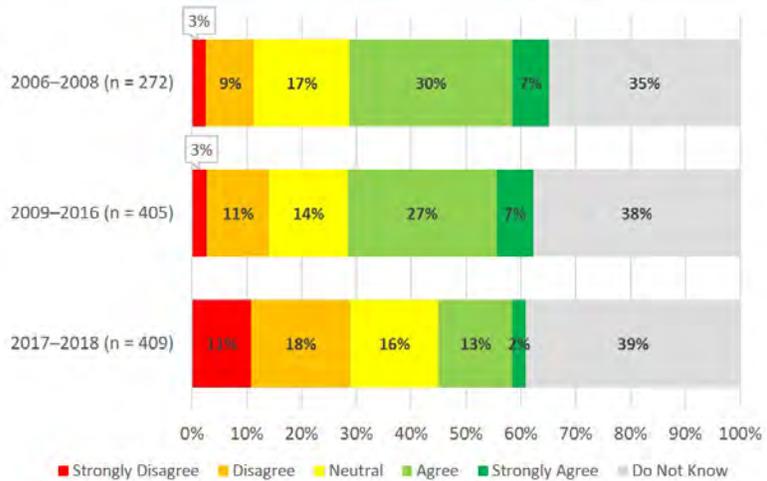
(e) Decisions to refer enforcement cases to states were documented in writing

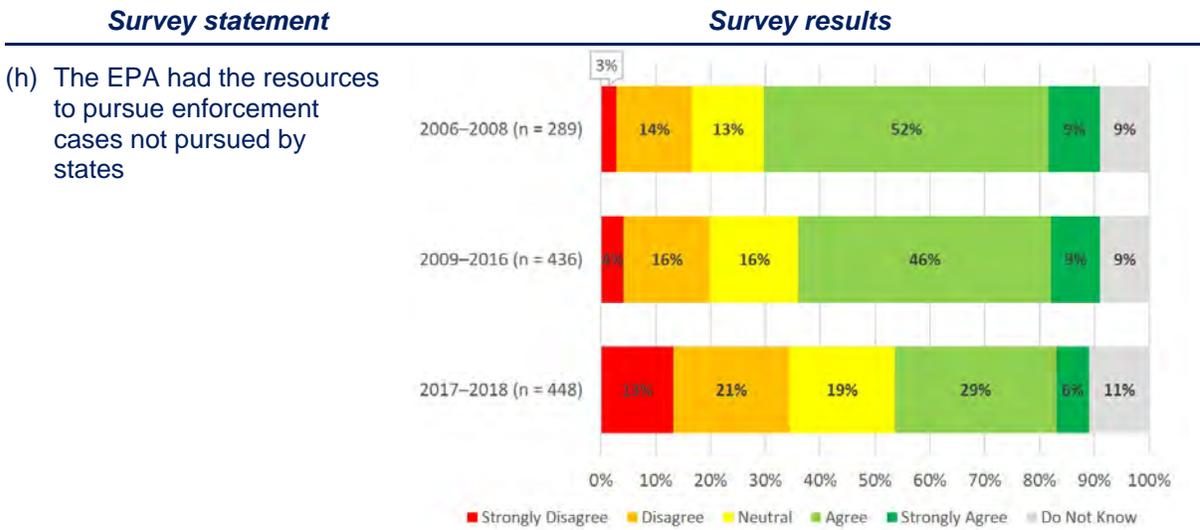


(f) The EPA followed up on the status of enforcement cases that were referred to states to determine whether states took appropriate actions and the facility returned to compliance



(g) If a state did not act on a referred enforcement case, the EPA took enforcement actions when appropriate



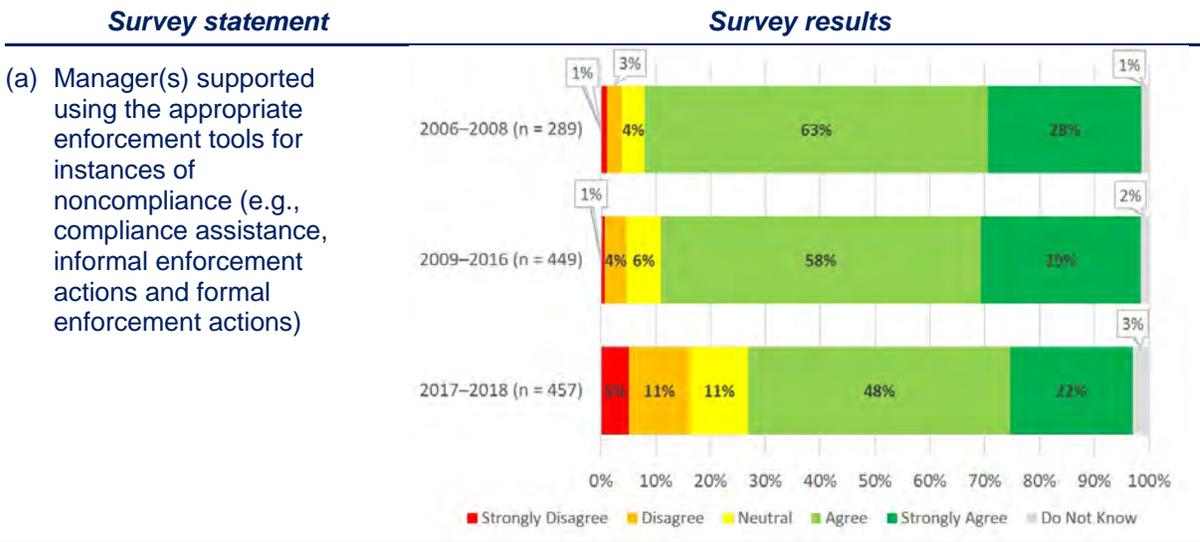


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About Collaborating with States to Pursue and Develop Enforcement Cases**

Survey respondents provided 158 comments about collaborating with states to pursue and develop enforcement cases. The most common sentiment expressed was that states lacked a combination of resources, expertise, or political will to take appropriate enforcement actions without the EPA. Many respondents also noted that it varied from state to state.

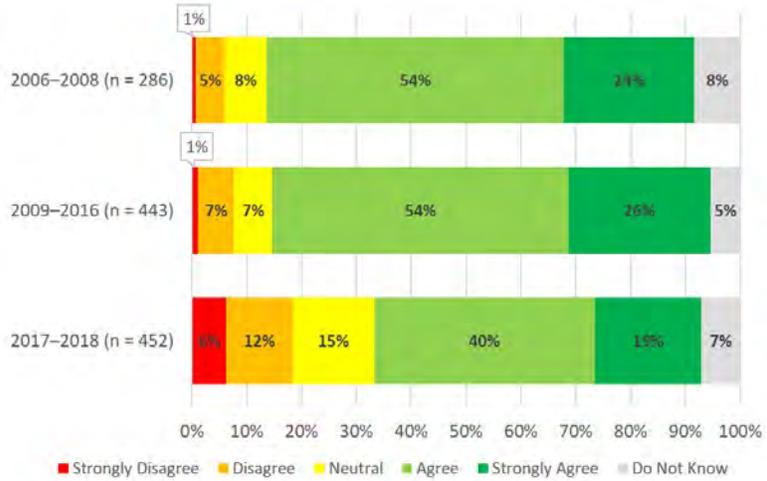
**Figure A-17: How much do you agree or disagree with the following statements about manager support of appropriate enforcement actions in your focus area?**



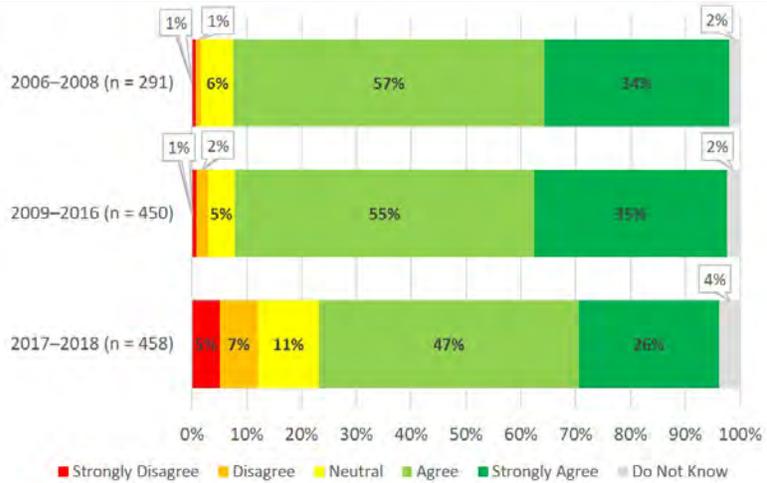
**Survey statement**

**Survey results**

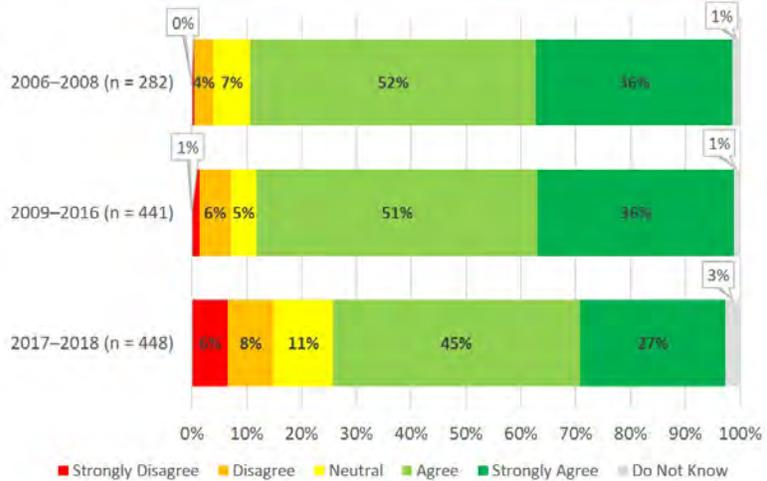
(b) Manager(s) supported pursuing enforcement actions across all regulated sectors



(c) Manager(s) supported using enforcement tools to protect human health and the environment



(d) Managers did not instruct me to avoid pursuing enforcement actions because the facility was in a certain industry sector

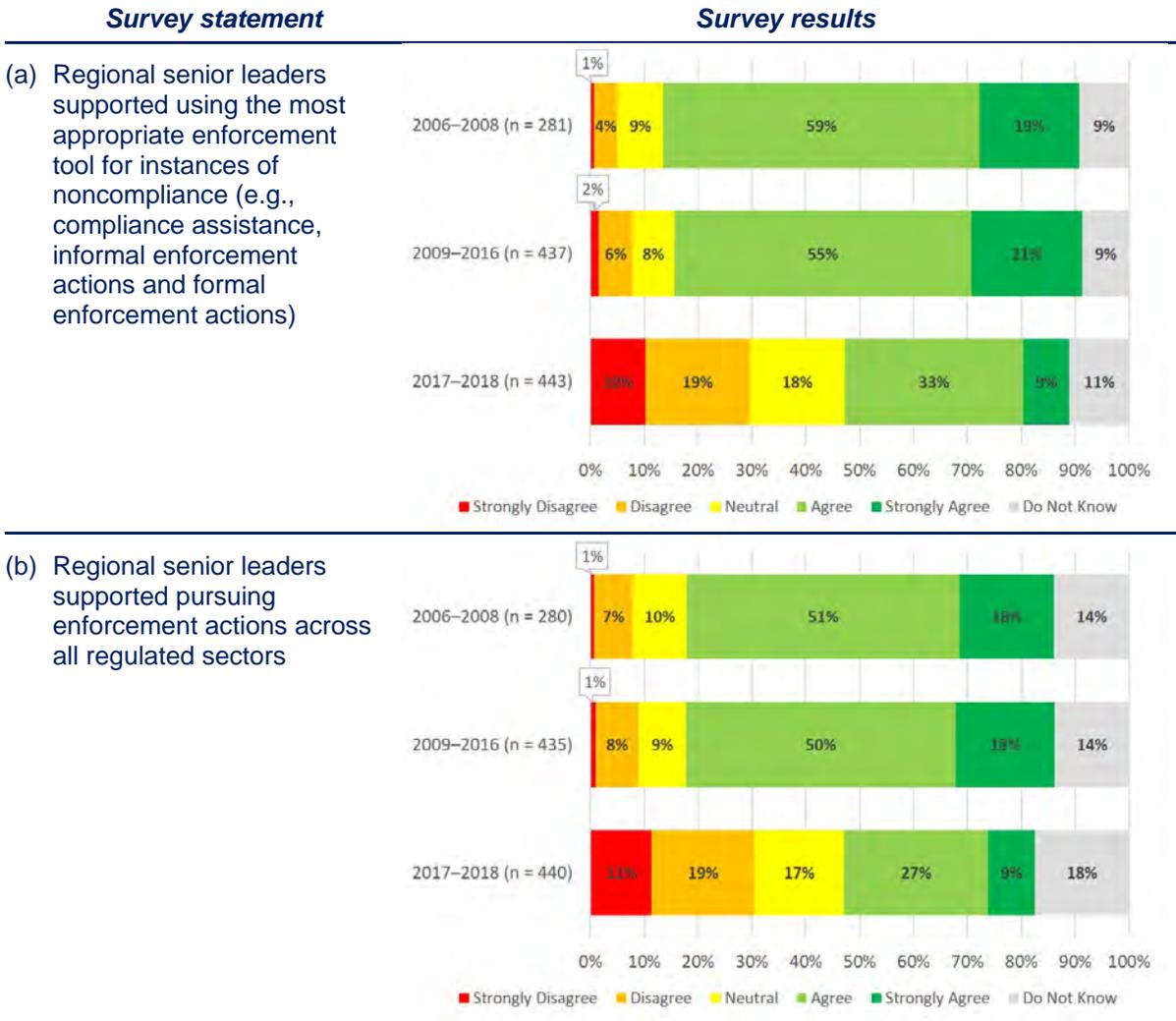


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About Managers' Support for Enforcement Cases**

Survey respondents provided 111 comments about managers' support for developing appropriate enforcement cases. The most common opinion expressed was that manager support for enforcement was adequate. Other respondents attributed changing support for and the slowdown of enforcement to political considerations, senior leadership, and a lack of resources.

**Figure A-18: How much do you agree or disagree with the following statements about regional senior leadership support of appropriate enforcement action in your focus area?**



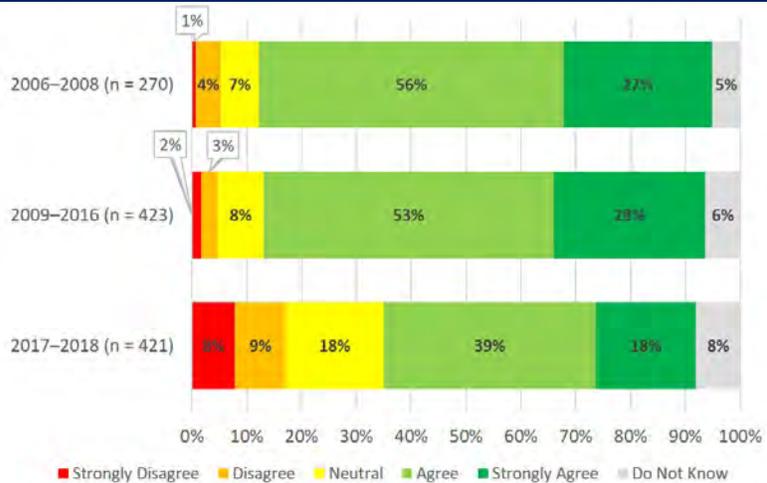
**Survey statement**

**Survey results**

(c) Regional senior leaders supported using enforcement tools to protect human health and the environment



(d) Regional senior leaders did not instruct me to avoid pursuing enforcement actions because the facility was in a certain industry sector

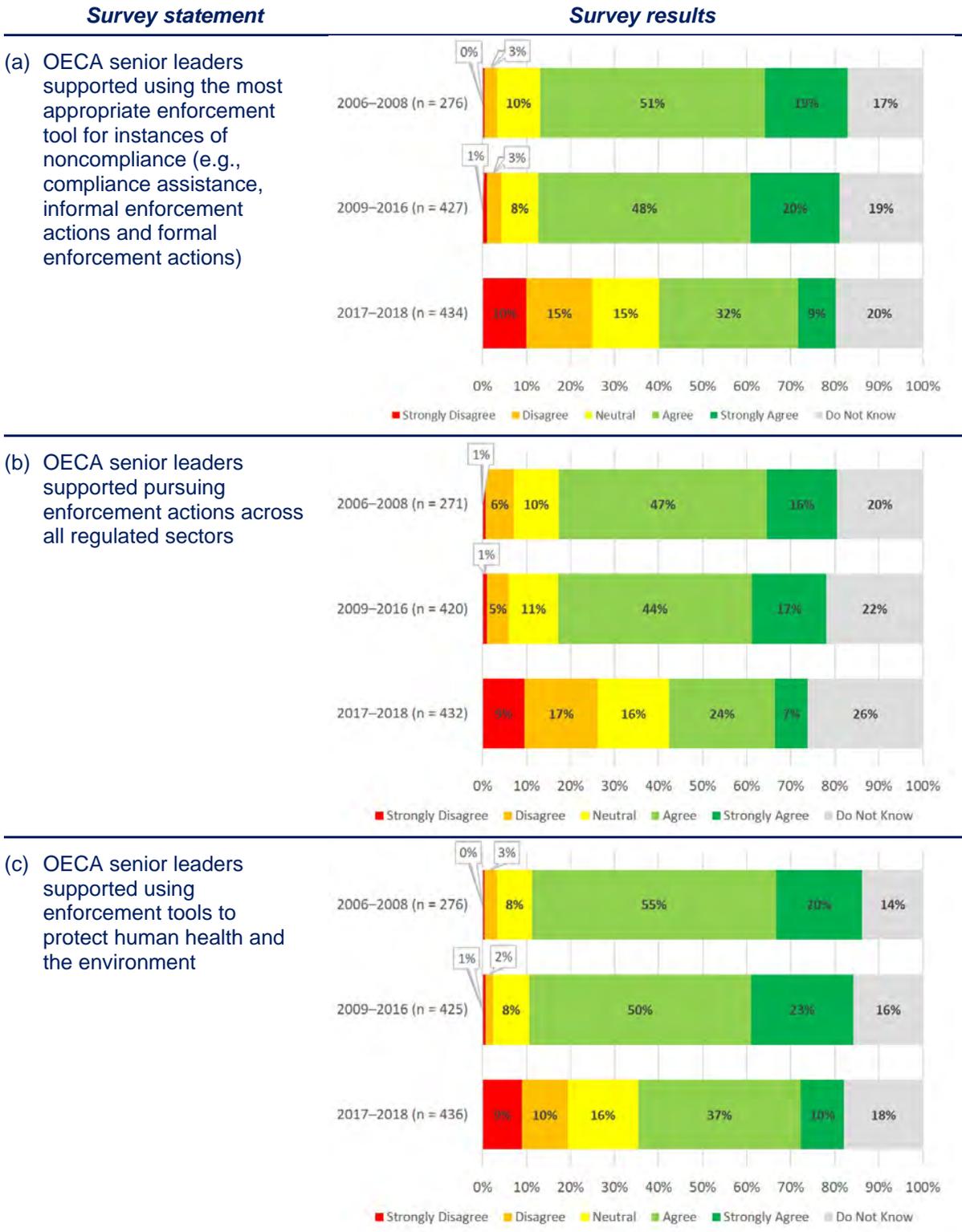


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About Regional Senior Leaders’ Support for Enforcement Cases**

Survey respondents provided 109 comments about regional senior leaders’ support for developing appropriate enforcement cases. The most common theme was that senior leadership does not support enforcement against certain sectors or entities, such as municipal governments. Some respondents indicated that they felt political considerations or political appointee actions constrained enforcement.

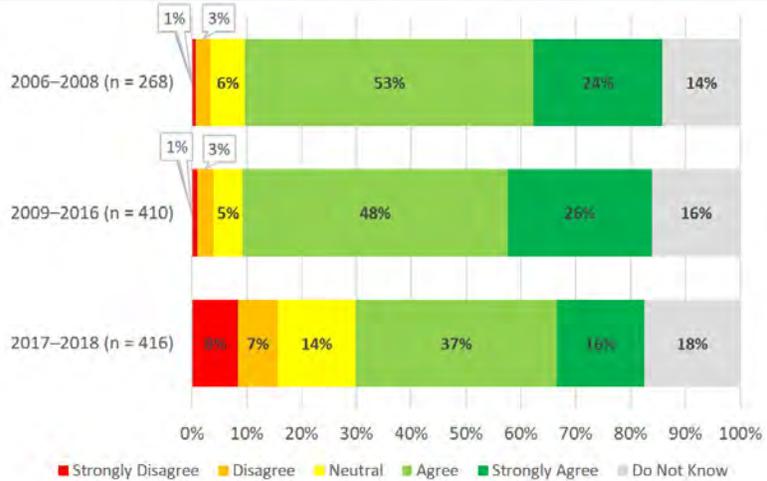
**Figure A-19: How much do you agree or disagree with the following statements about OECA senior leadership support of appropriate enforcement action in your focus area?**



**Survey statement**

**Survey results**

(d) OECA senior leaders did not instruct me to avoid pursuing enforcement actions because the facility was in a certain industry sector



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About OECA Senior Leaders’ Support for Enforcement Cases**

Survey respondents provided 95 comments about OECA senior leaders’ support for developing appropriate enforcement cases. Common themes included that:

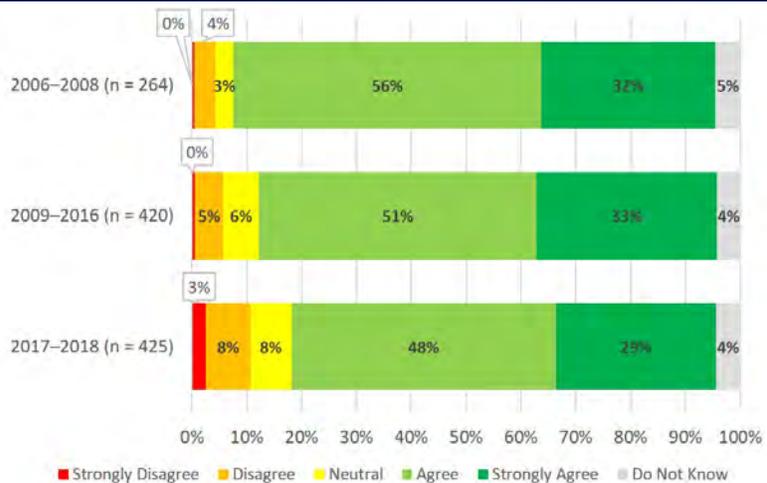
- OECA senior leaders interfered with enforcement.
- OECA policies and requirements made enforcement more difficult.
- OECA senior leaders did not support using the correct or appropriate enforcement tools.
- OECA senior leaders did not support enforcement against certain sectors or entities, such as municipal governments.

**Figure A-20: How much do you agree or disagree with the following statements about coordinating with counsel during case development in your focus area?**

**Survey statement**

**Survey results**

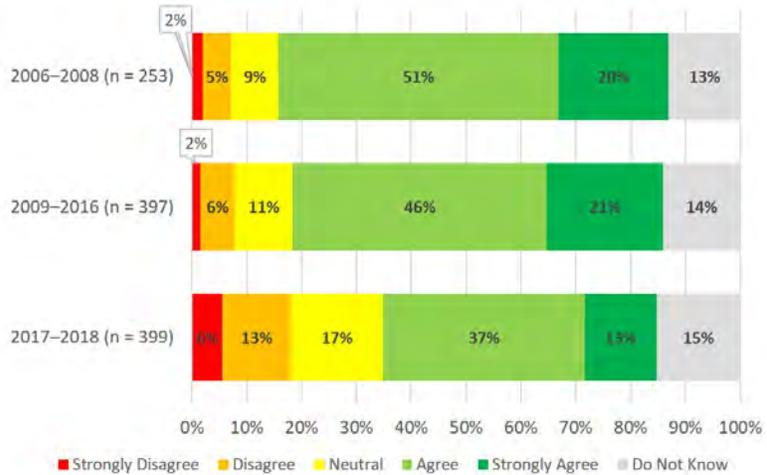
(a) EPA regional program staff effectively coordinated with EPA regional attorneys to develop and conclude enforcement cases



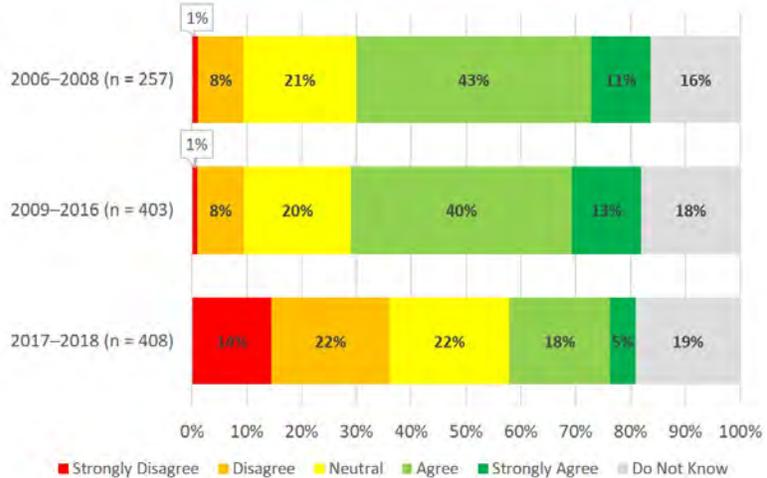
**Survey statement**

**Survey results**

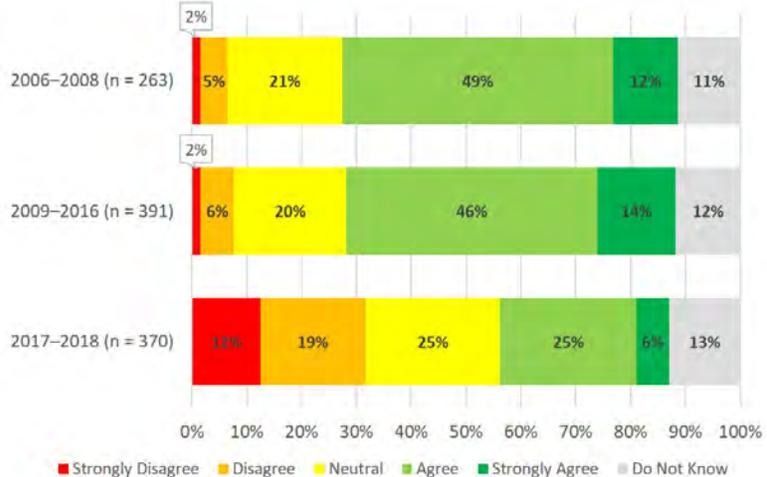
(b) The EPA effectively coordinated with the U.S. Department of Justice (DOJ) to develop and conclude civil judicial cases



(c) Active/applicable policies improved the development and conclusion of civil judicial cases



(d) Active/applicable policies improved the development and conclusion of civil administrative cases

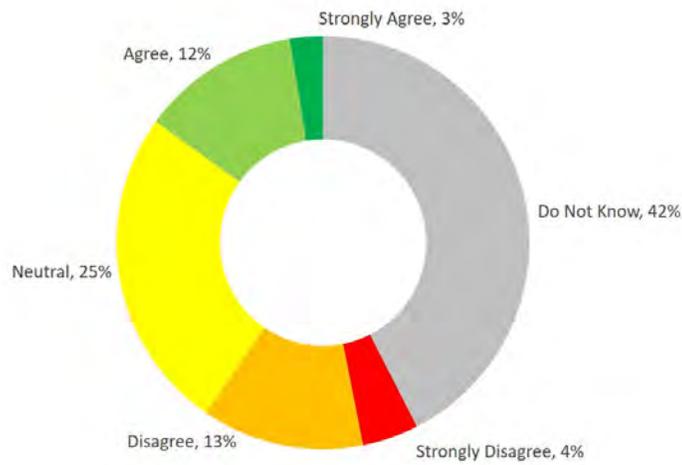


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Theme from Comments About Coordinating with Counsel During the Development of Enforcement Cases**

Survey respondents provided 104 comments about coordinating with counsel while developing enforcement cases. The most common theme was that new interpretations of the law or new agency policies make enforcement difficult and confusing, with some specifically citing the 2019 DOJ supplemental environmental projects policy that constrained SEPs in enforcement actions against state and local governments.

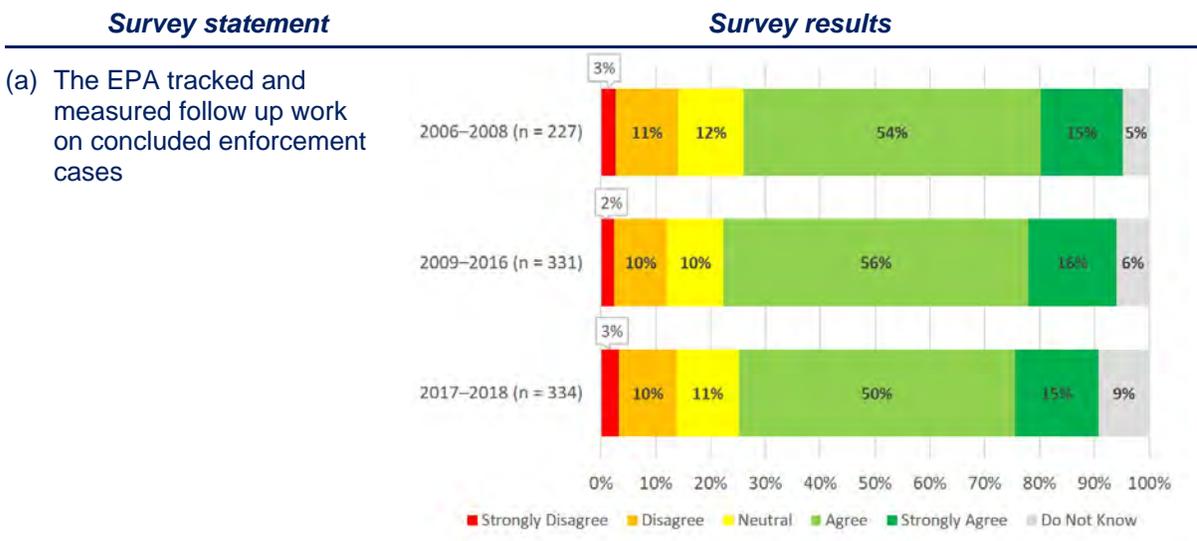
**Figure A-21: How much do you agree or disagree that the November 10, 2015, EPA/DOJ memorandum, *Improving the Pace of Cases from Referral to Resolution*, improved the environmental enforcement process? (n = 386)**



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

**Case Follow-Up**

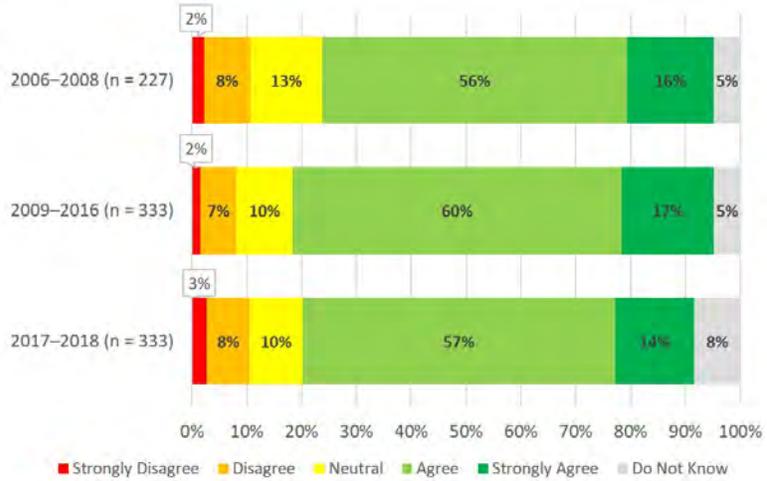
**Figure A-22: How much do you agree or disagree with the following statements about work related to following up on concluded enforcement cases in your focus area?**



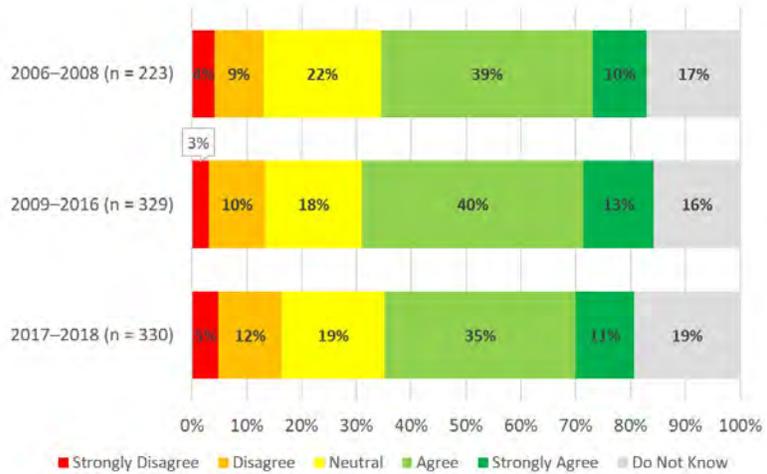
**Survey statement**

**Survey results**

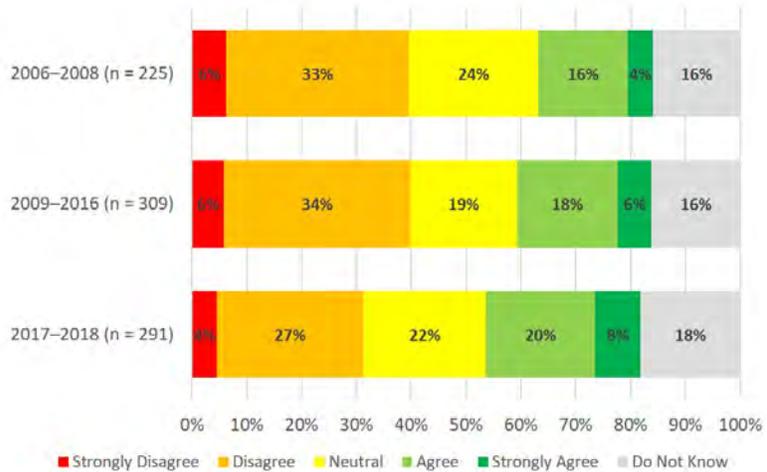
(b) The EPA followed up on concluded cases to make sure agreed upon terms and activities were being completed



(c) The EPA tracked and measured whether concluded cases contributed to improved compliance and protection of human health and the environment



(d) Post case conclusion activities by the EPA prevented staff from developing new cases

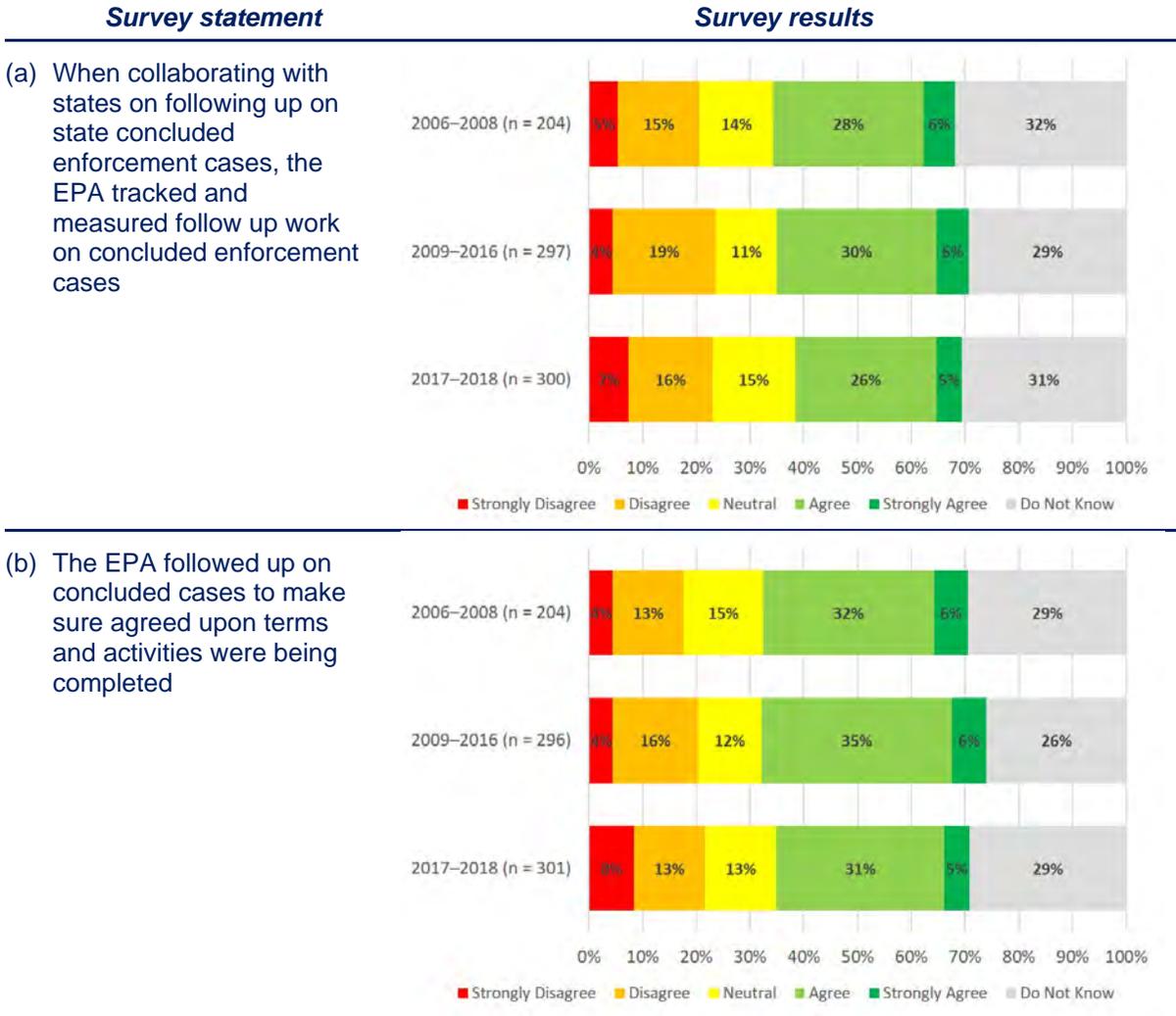


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

**Key Themes from Comments About Work Related to Following Up on Concluded Enforcement Cases**

Survey respondents provided 71 comments about following up on concluded enforcement cases. Common themes included that the Agency does not prioritize or reward case follow-up activities despite being a required part of their job and that a lack of resources, time, and personnel prevented case follow-up activities from being completed appropriately.

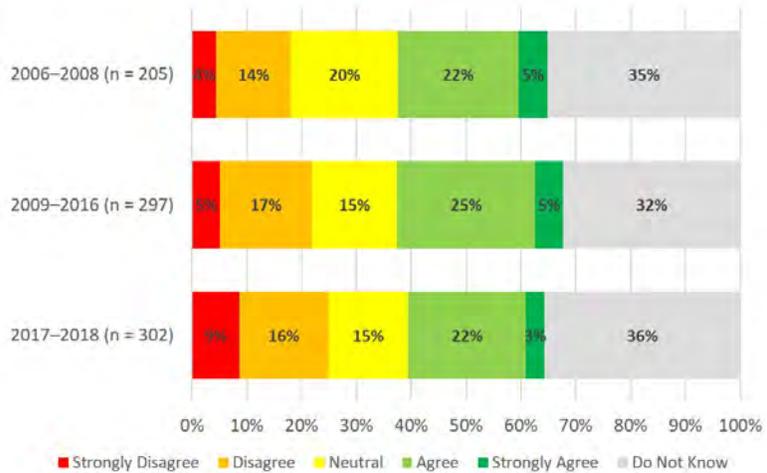
**Figure A-23: How much to do you agree or disagree with the following statements about collaborating with states on following up on state-concluded enforcement cases in your focus area?**



**Survey statement**

**Survey results**

(c) The EPA tracked and measured whether concluded cases contributed to improved compliance and protection of human health and the environment



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG images)

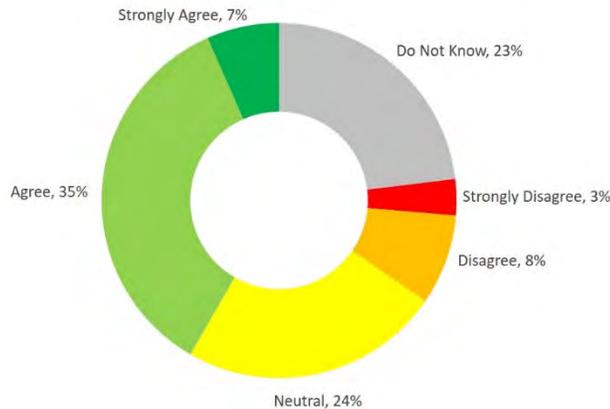
**Key Themes from Comments About Work Related to Following Up on State-Concluded Enforcement Cases**

Survey respondents provided 68 comments about following up on state-concluded enforcement cases. Excluding respondents that simply noted that they did not work in delegated programs, common themes included that:

- State case follow-up is not done or is rarely done appropriately.
- State case follow-up is regularly done, as it is required, but is occasionally limited in scope.
- The Agency does not have enough resources, time, or personnel to properly conduct state case follow-up activities.

**Enforcement Program Results and Integrity**

**Figure A-24: How strongly do you agree or disagree that enforcement data related to your focus area in the Integrated Compliance Information System (ICIS) are accurate and timely? (n = 607)**



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

**Key Themes from Comments About the Accuracy and Timeliness of ICIS Data**

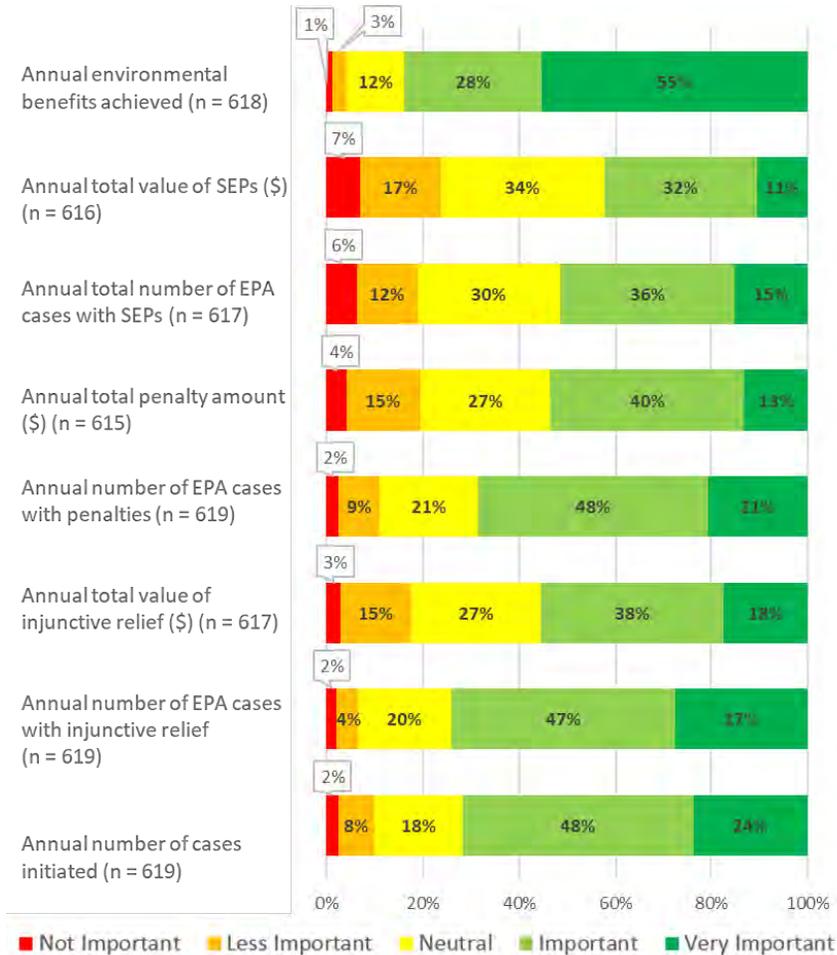
Survey respondents provided 81 comments about the accuracy and timeliness of ICIS data. The most common theme was that ICIS is difficult and time-consuming to use and has accuracy issues. Many respondents attributed some of the potential inaccuracies and double entries to the use of other program-specific databases.

**Key Themes from Comments About Improving the Accuracy of ICIS Data**

Survey respondents provided 318 comments about improving the accuracy of ICIS data. The most common themes included suggesting:

- Additional features to improve the functionality and user-friendliness of ICIS.
- New policies, best practices, or training to ensure timely and accurate data entry.
- Data entry requirements are unclear or that the data in ICIS are inaccurate because of poorly formulated metrics.

**Figure A-25: How would you rate the importance of the given enforcement measures for evaluating the success of the EPA's enforcement program?**

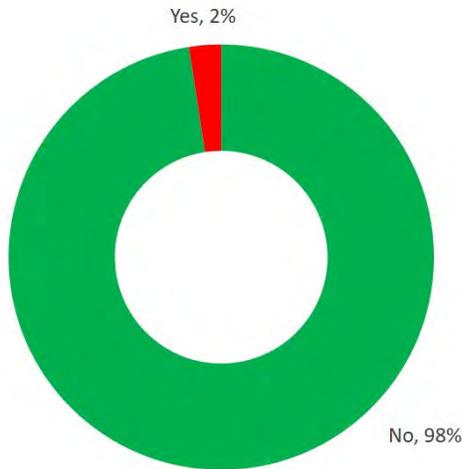


Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

**Key Themes from Comments About Enforcement Measures**

Survey respondents provided 148 comments about enforcement measures. The most common themes were that the estimates of these measures are inaccurate and flawed, and 20 respondents believed that the outcome-based measures related to concluded cases provided the wrong incentives and distracted from the EPA’s mission of protecting human health and the environment.

**Figure A-26: Are you aware of any EPA personnel who, in response to Freedom of Information Act (FOIA) requests regarding enforcement, provided false or incomplete, misleading, or inappropriately redacted information or withheld information inappropriately? (n = 618)**



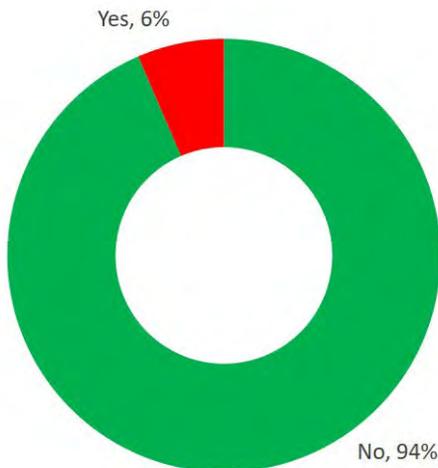
Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

**Key Themes from Comments About Responses to FOIA Requests**

Survey respondents provided 18 comments about responding to FOIA requests. The common themes in these limited comments were that:

- Management intervened to withhold information in Agency responses to FOIA requests.
- Poor FOIA training led to errors in FOIA responses.
- The interpretation of FOIA provisions were sometimes stretched to provide a limited response or no response to a FOIA request.

**Figure A-27: Are you aware of any EPA managers downplaying or ignoring the significance of violations when relaying inspection findings to OECA and senior leadership? (n = 618)**



Source: OIG analysis of the 2019 OIG Enforcement Survey. (EPA OIG image)

***Key Theme from Comments About EPA Managers Downplaying or Ignoring Violations When Reporting Inspection Findings***

Survey respondents provided 44 comments about EPA managers downplaying or ignoring violations when reporting inspection findings. The most common theme was that respondents were aware of cases in which EPA managers or OECA senior leaders downplayed or ignored the significance of violations or did not report them.

## **Areas of Concern From 2019 OIG Enforcement Survey**

We identified the following areas of concern during our analysis of the results of the 2019 OIG Enforcement Survey:

- Survey results show some concern by EPA personnel about deference to states, specifically that the:
  - EPA is deferring serious cases to states.
  - States do not have the capacity to handle the cases being deferred to them.
  - EPA does not sufficiently oversee state inspection work or referred cases.
  - Political motivations often impact enforcement cases.
- Through their survey responses, enforcement personnel indicated concern that recently instituted policies hinder the enforcement program. For example, the:
  - Sixty-day inspection report requirement from a June 2018 memorandum does not allow for the documentation of complex cases and signals that the Agency does not care about the quality of the inspection report.

- New policies related to supplemental environmental projects hinder enforcement.
- Metrics for measuring benefits do not incentivize enforcement that protects human health and the environment.
- Survey results indicated that enforcement personnel perceived a decline in leadership support for compliance monitoring and enforcement case development at the regional and OECA senior leadership levels. Personnel perceive that:
  - Leaders screen enforcement cases for political considerations.
  - Political considerations play a role in which cases are further developed.
  - There is an overuse of compliance assistance over traditional enforcement activities.

## ***Enforcement Trends by EPA Region and Headquarters***

This appendix presents the trends in the EPA's annual enforcement results from FYs 2007 through 2018 by EPA region and headquarters to a greater degree than in Chapter 2. Trends in regional and headquarters enforcement results generally followed the declining national trends we reported earlier. The regions are responsible for most of the EPA's enforcement activities. The regions concluded 97 percent of enforcement actions from FYs 2007 through 2018, and headquarters concluded the remaining 3 percent of enforcement actions. As with the national analyses, we removed FY 2006 results from our regional and headquarters analyses after determining that the anomalously high number of concluded enforcement actions in FY 2006 masked the overall trends. We also provide a postscript to our analyses of FYs 2007 through 2018 trends by comparing the FY 2019 results to FY 2018. We include one-page summaries of the enforcement trends for actions concluded by each of the ten EPA regions and headquarters at the end of this appendix.

Throughout this appendix, we provide weblinks to EPA enforcement case summaries for the convenience of the reader who wishes to learn more about these cases. The enforcement results reported in some of these case summaries vary from those that we calculated from the data we retrieved from OECA's internal Federal Enforcement and Compliance Dashboard because we adjusted all monetary enforcement results to 2018 USD.

### **EPA's Compliance Monitoring, Enforcement Actions, and Enforcement Results for Most Regions Generally Declined**

From FYs 2007 through 2018, enforcement trends within regions generally followed the declining national trends for:

- Compliance monitoring activities.
- Enforcement actions initiated and concluded.
- Enforcement results.
- Environmental benefits.

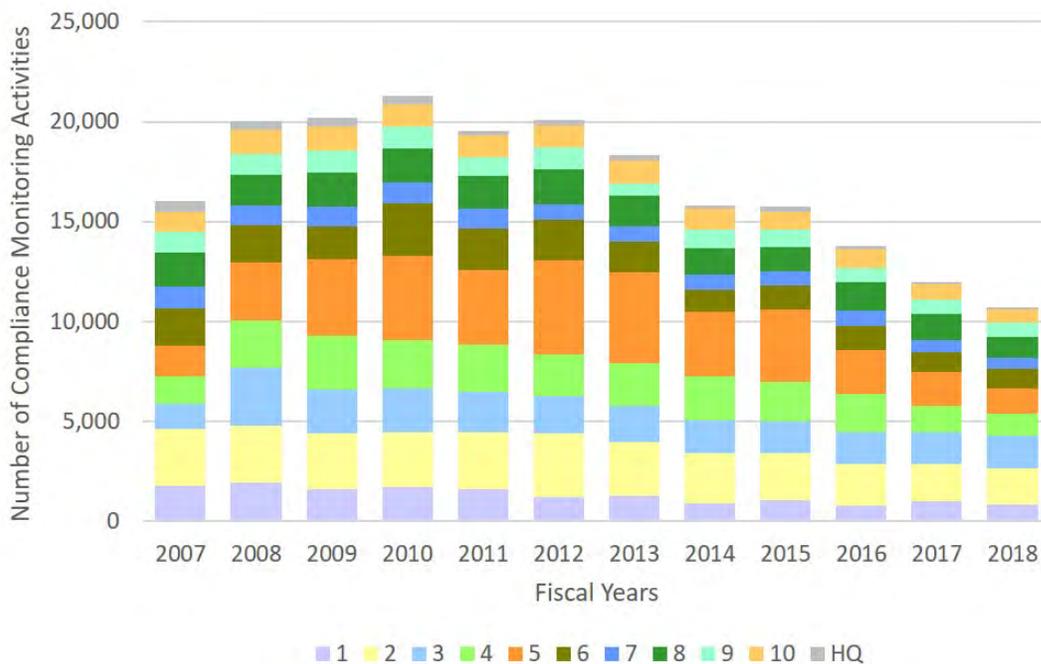
Regions 2 and 5 completed the most compliance monitoring activities and Regions 4 and 6 initiated and concluded the most cases. As a result, these regions greatly influenced the national trends in concluded enforcement actions. From FYs 2012 through 2018, the national total number of commitments toward environmental benefits as part of concluded enforcement cases declined or remained steady over time. Three regions, Regions 4, 5 and 9, accounted for the largest totals of the commitments towards environmental benefits.

### ***EPA's Regional Compliance Monitoring Activities Decreased***

The EPA's compliance monitoring activities decreased by 33 percent, when comparing FYs 2007 and 2018 (Figure B-1). All of the ten regions and EPA headquarters completed their

highest total annual number of compliance monitoring activities prior to FY 2013. Following FY 2012, the number of activities nationwide decreased steadily, though regions and headquarters experienced temporary increases. Region 5, which completed 4,706 compliance monitoring activities in FY 2012, had the highest total of any region from FYs 2007 through 2018. Region 5 accounted for 23 percent of all EPA compliance monitoring activities in FY 2012.

**Figure B-1: Total compliance monitoring activities by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

Overall, Regions 2 and 5 completed the highest number of compliance monitoring activities from FYs 2007 through 2018, accounting for 15 and 18 percent of the total, respectively. Region 5 is notable for its fluctuations in compliance monitoring activities increasing in four out of five years from FYs 2007 through 2012 and declining in five out of six years from FYs 2012 through 2018. Region 5 accounted for the second-largest single-year increase in compliance monitoring activities, increasing by 1,386 activities in FY 2008. In addition, it accounted for the largest and second-largest annual declines in compliance monitoring activities recorded during this time period in which the number of activities declined by 1,440 in FY 2016 and 1,266 in FY 2014.

### Compliance Monitoring Activities in FY 2019

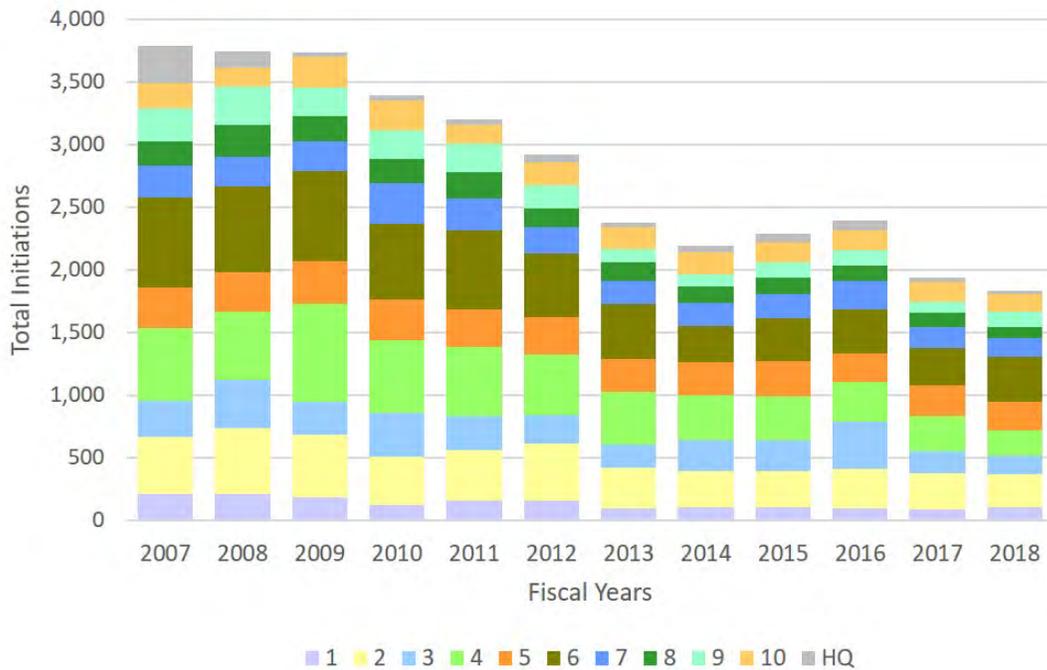
Total annual compliance monitoring activities continued to decline in FY 2019, dropping by 4 percent, a net decrease of 406 activities relative to FY 2018. The number declined in six regions (Regions 1, 2, 3, 4, 8, and 10), and at EPA headquarters. The number of compliance monitoring activities undertaken by Region 1 declined by 38 percent or 319 activities relative to FY 2018, which is the largest decrease recorded that fiscal year. Compliance monitoring activities in the other regions (EPA Regions 5, 6, 7, 9) increased

in FY 2019 between 7 and 17 percent. The largest increase in the number of compliance monitoring activities occurred in Region 6, where the number increased by 134 activities 13 percent, relative to FY 2018.

### ***EPA Regions Initiated Fewer Enforcement Actions***

The EPA initiated 51 percent fewer enforcement actions in FY 2018 compared to FY 2007 (Figure B-2). All regions completed their highest total annual number of initiated actions prior to FY 2010—for most regions this occurred in FYs 2007 or 2008. From FYs 2010 through 2018, the number of initiated enforcement actions declined yearly in most EPA regions, except in FYs 2014 and 2015.

**Figure B-2: Civil enforcement cases initiated by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

Overall, Regions 4 and 6 initiated the most enforcement actions, accounting for 16 and 18 percent of the total 33,783 initiations for FYs 2007 through 2018, respectively. The largest annual decrease occurred in Region 3 in FY 2017. That year the number of initiations fell by 201, a 54-percent decrease. This decrease accounted for 44 percent of the total national decline in initiated enforcement actions in FY 2017, which was 454 actions. The largest single increase occurred in Region 4 in FY 2009 in which the number of initiated enforcement actions rose by 234, a 43-percent increase relative to 2008. In FY 2010, the following year, the number of initiations in Region 4 decreased by 198, a 25-percent decrease relative to FY 2009.

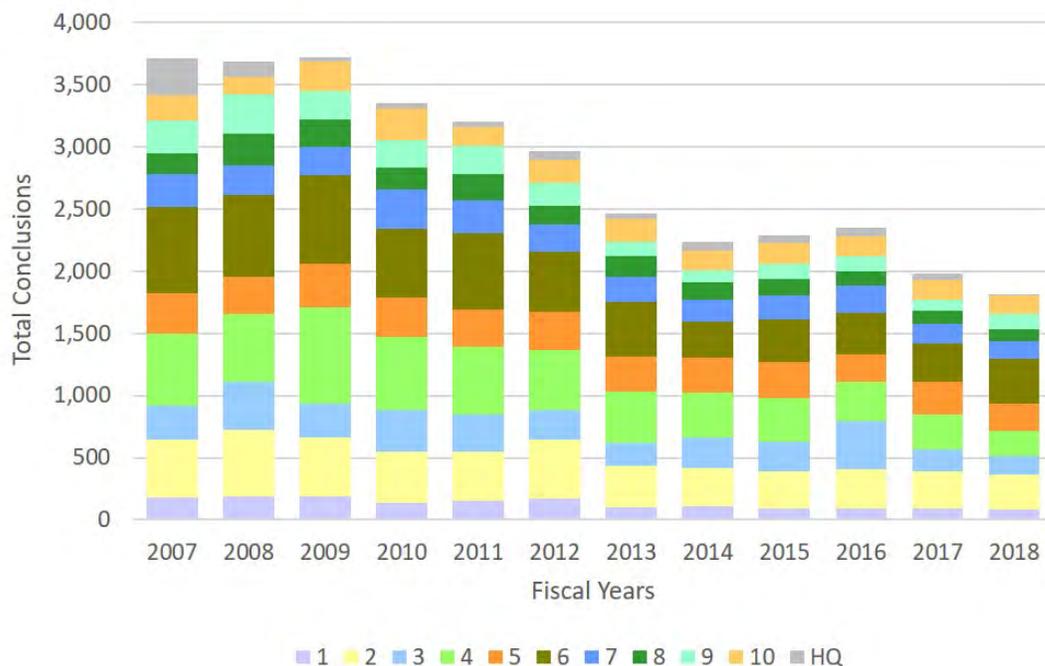
## Initiated Enforcement Actions in FY 2019

Total annual initiated enforcement actions continued to decline nationally and across most of the EPA regions and headquarters in FY 2019 relative to FY 2018. In total, the number of initiations decreased by 154 cases, an 8-percent drop. The largest decrease occurred in Region 6, where initiations declined by 47, a 13-percent decline. Only Regions 8 and 9 initiated more enforcement actions, with increases of 6 and 15 percent, or five and 18 actions, respectively.

### ***EPA Regions Concluded Fewer Enforcement Actions***

The annual total number of concluded enforcement actions declined in all of the regions and headquarters when comparing FYs 2007 and 2018 and decreased nationally from 3,714 in FY 2007 to 1,819 in FY 2018 (Figure B-3). All but one region completed their highest total annual number of concluded enforcement actions in a fiscal year prior to FY 2011. For many regions, this high occurred in FYs 2008 or 2009.

**Figure B-3: Civil enforcement cases concluded by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

As with the initiations, Regions 4 and 6 concluded the most enforcement actions, accounting for 16 and 17 percent of the 33,783 total conclusions from FYs 2007 through 2018, respectively. The single largest annual decline occurred in Region 3 in FY 2017 in which the annual number of concluded enforcement actions decreased by 205, a 53-percent decrease relative to FY 2016, which was the single anomalously high total that occurred after FY 2010. Otherwise, large increases in the number of concluded enforcement actions by each of the regions generally occurred prior to FY 2010. The largest single increase occurred in Region 4 in FY 2009 in which

the number of concluded enforcement actions rose by 228, a 42-percent increase relative to FY 2008. However, in FY 2010, the following year, the number of conclusions in Region 4 decreased by 193, a 25-percent decrease from the previous year.

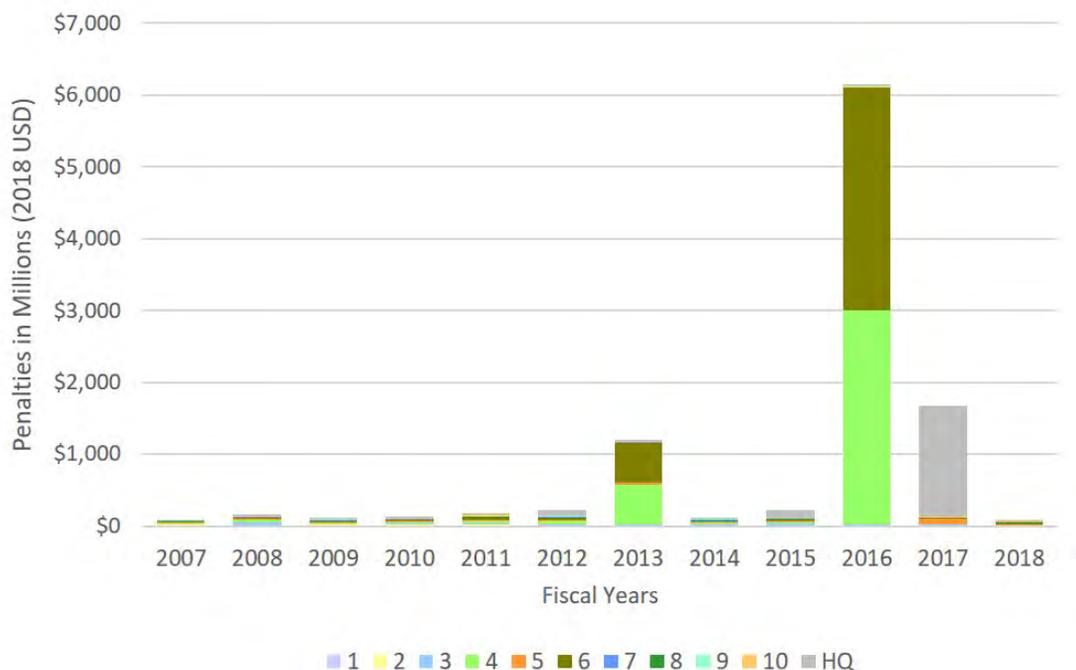
### Concluded Enforcement Actions in FY 2019

The total annual number of concluded enforcement actions continued to decline nationally in FY 2019, decreasing by an additional 7.5 percent, or 136 conclusions, relative to FY 2018. The total number of concluded enforcement actions declined in most regions and headquarters. Only Regions 1, 8, and 9 saw increases of 24, 12, and nine conclusions respectively in FY 2019. The largest decrease occurred in Region 6 in which the region concluded 43 fewer enforcement actions, or 13 percent, relative to FY 2018.

### Large Enforcement Actions in Regions 4 and 6 and Headquarters Accounted for Most of the Total Penalty Value

The total dollar value of EPA-assessed penalties varied dramatically from FYs 2007 through 2018 as a result of the conclusions of large enforcement actions (Figure B-4). Together, Regions 4 and 6 accounted for 73 percent of the total \$10.25 billion penalty dollars. For the two regions, most of those penalties were in FY 2016. Headquarters accounted for another 18 percent, mostly from its total in FY 2017. In contrast, penalties by the other eight regions combined for just 9 percent of the total.

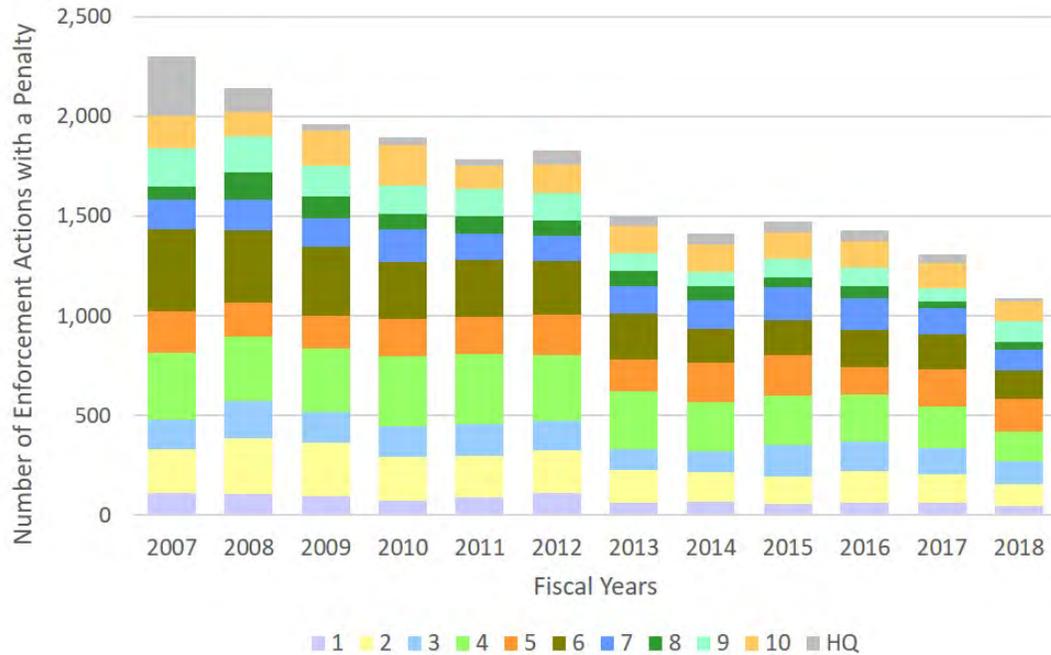
**Figure B-4: Penalties assessed in millions by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

Regions 1 and 8 consistently issued the fewest penalties each year and together accounted for just 9 percent of the total enforcement actions with a penalty from FYs 2007 through 2018 (Figure B-5).

**Figure B-5: Number of penalties assessed by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

The number of enforcement actions with a penalty assessed declined across the regions and headquarters in most years from FYs 2007 through 2018 with some year-to-year variability. Regions 4 and 6 and headquarters, which together accounted for 91 percent of the total penalty dollars, accounted for only 36 percent of the total 20,115 enforcement actions with a penalty assessed.

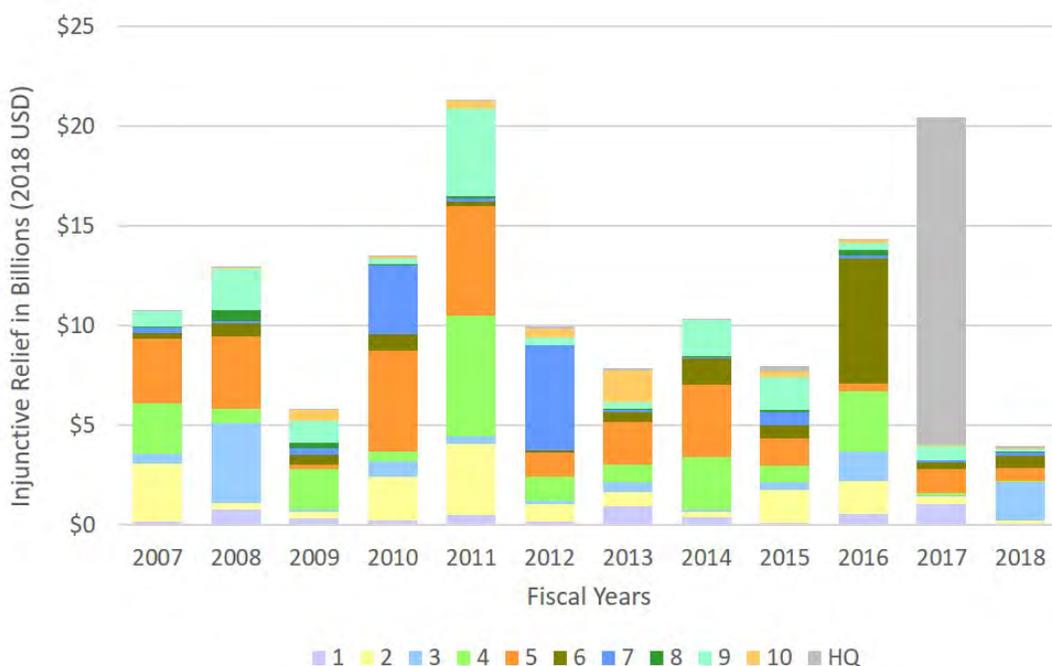
### Penalties in FY 2019

The number of enforcement actions with penalties decreased by 12 percent in FY 2019, from 1,088 in FY 2018 to 960 in FY 2019. Much of this 128-action decrease resulted from decreases in the number of Region 4 and 6 actions, which dropped by 25 and 55 actions with penalties, respectively. Meanwhile, the total monetary value increased by \$284 million, a 408-percent increase from FY 2018. The increase resulted from the \$282 million reported penalties from EPA headquarters in FY 2019. However, the FY 2018 total represents the lowest penalty value from FYs 2007 through FY 2019, and the FY 2019 total was a 79-percent decrease from the FY 2017 value of \$1.67 billion to the FY 2019 value of \$354 million.

## EPA Regions Concluded Fewer Actions with Injunctive Relief

The regional and headquarters total injunctive relief values did not follow a predictable pattern from FYs 2007 through 2018 (Figure B-6). For example, Region 4's annual value ranged from \$2.5 billion in FY 2007 to \$0.72 billion in FY 2008 to \$2.0 billion in FY 2009. Region 5 reported the largest total value, with 20 percent of the total \$139 billion dollars, followed by Region 4 with 15 percent. In general, the regional and headquarters injunctive relief values were determined by which region concluded large enforcement actions, such as the enforcement action against [B.P. Production & Exploration Inc.](#), concluded by Region 6 in FY 2016, which accounted for 97 percent of Region 6's injunctive relief value for FY 2016, and 57 percent of the region's total injunctive relief value from FYs 2007 through 2018.

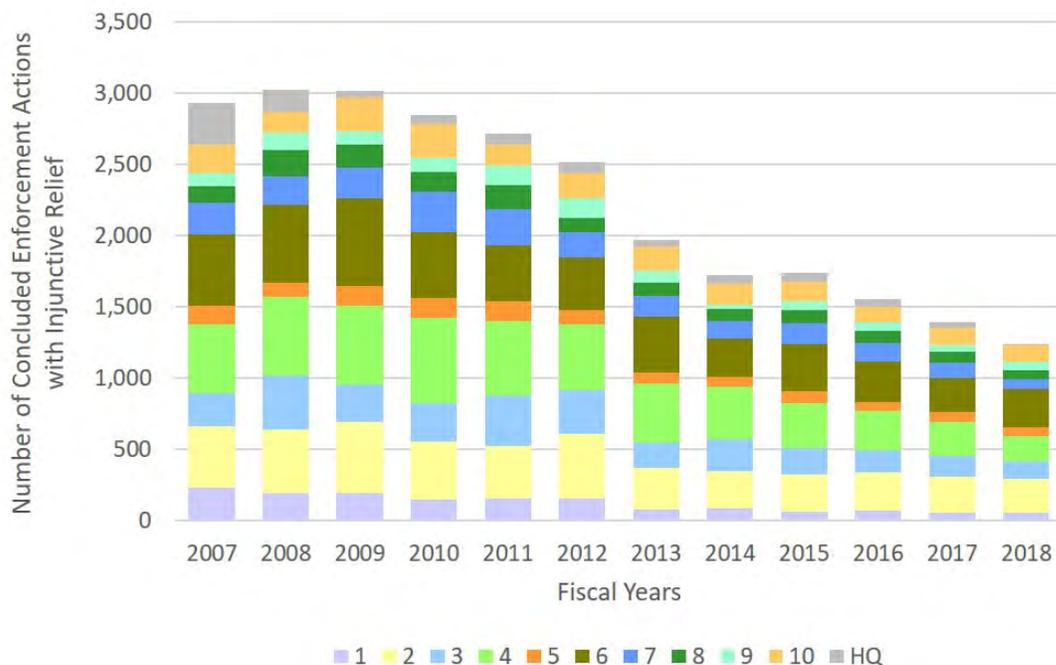
**Figure B-6: Injunctive relief in billions by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

Overall, the number of concluded enforcement actions with injunctive relief declined across most regions and headquarters most years from FYs 2007 through 2018 (Figure B-7). Notably, some regions accounted for a significant portion of the reduction in the total number of enforcement actions with injunctive relief concluded annually. For example, significant reductions in FY 2013 concluded actions occurred primarily in Regions 1, 2 and 3, which cumulatively accounted for 68 percent of the decrease from the previous fiscal year.

**Figure B-7: Number of enforcement actions with injunctive relief by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

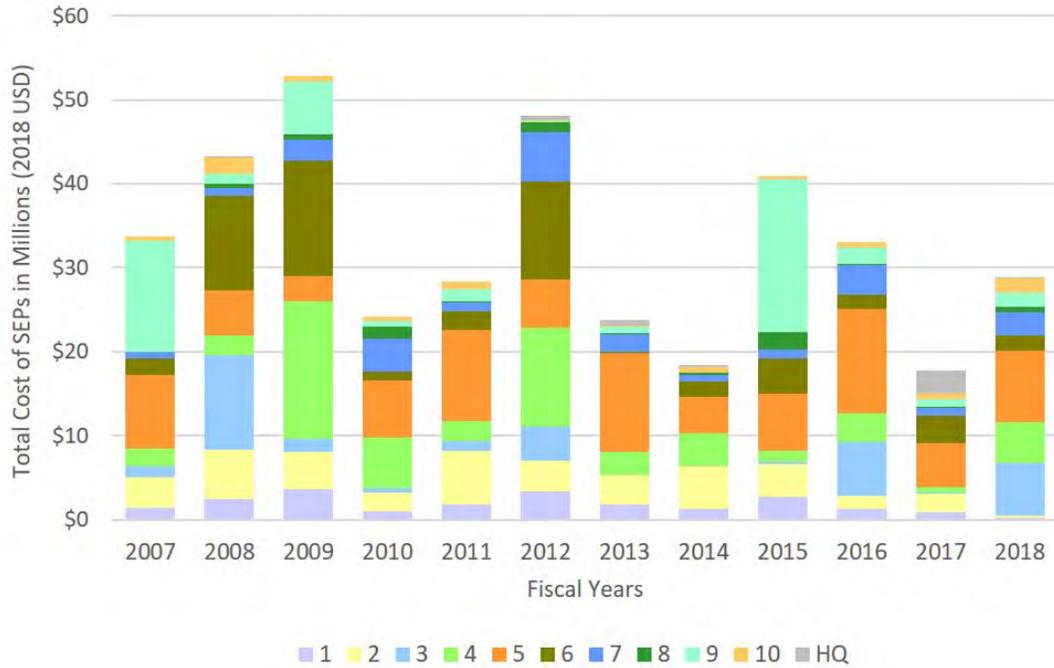
### Injunctive Relief in FY 2019

The number of enforcement actions with injunctive relief continued to decline in FY 2019, from 1,233 enforcement actions in FY 2018 to 1,028 in FY 2019, a 17-percent decrease. Meanwhile, the total injunctive relief value increased by 9 percent (\$3.99 to \$4.35 billion). Overall, seven out of the ten regions concluded fewer enforcement actions with injunctive relief in FY 2019 than in FY 2018, and the reported value from injunctive relief decreased in five out of ten regions in FY 2019. The largest decrease in value occurred in Region 3, which reported \$40 million of injunctive relief in FY 2019, down from \$1.9 billion in FY 2018. The largest increase in value occurred in Region 2, which reported \$1.97 billion in injunctive relief value in FY 2019, up from \$0.17 billion in FY 2018.

### **Supplemental Environmental Projects Decreased Across Most Regions**

As with other monetary results, concluded enforcement actions with large values (in this case SEPs valued at \$1 million or more) affected the annual value, comprising 59 percent of the value but only 5 percent of the number of actions concluded with SEPs. The annual value for SEPs fluctuates year-to-year because conclusion of actions with these large SEPs occurs sporadically. This variability over time is particularly pronounced when the value of SEPs is broken down by region and headquarters (Figure B-8). Overall, Region 5 generated the highest dollar value of SEPs, with 23 percent of the total \$393 million reported for FYs 2007 through 2018. However, Region 5's proportion of the annual total value fluctuated between 6 and 49 percent. Regions 8 and 10 had the lowest total SEPs value, accounting for just 2 percent of the overall value each.

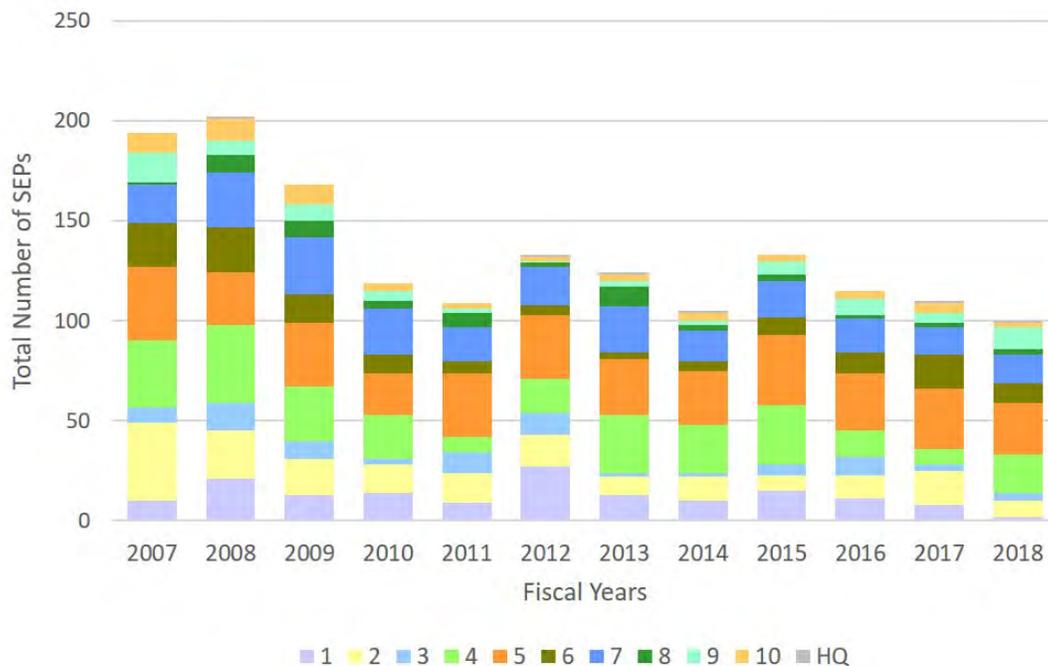
**Figure B-8: Total cost of SEPs in millions by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

A few regions contributed a large portion of the annual total number of SEPs (Figure B-9). For example, Region 5 had amongst the most SEPs each year and accounted for 23 percent of the total 1,612 SEPs from FYs 2007 through 2018. On the other hand, four regions (Regions 3, 8, 9, and 10) together led conclusions with only 17 percent of the total SEPs. Overall, from FYs 2007 through 2018, the annual number of SEPs declined in all regions, except Region 8, with some year-to-year variation, and dropped nationally from 194 to 100 SEPs.

**Figure B-9: Total number of SEPs by EPA region and headquarters, FYs 2007 through 2018**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

**Supplemental Environmental Projects in FY 2019**

Five regions and headquarters decreased the total number of SEPs by 26 in FY 2019 relative to FY 2018; the other four regions (except Region 3, which did not change) increased the number of SEPs by eight, resulting in a net decrease of 18 SEPs, or 18 percent. Likewise, the total value decreased by a net total of \$3.5 million, or 12 percent, with five regions and headquarters decreasing the value from SEPs by \$12.2 million and five regions increasing the value by \$8.7 million.

**A Few Regions Accounted for Most of the Commitments Toward Environmental Benefits**

In FY 2012, the EPA began tracking and reporting three types of environmental benefits from its concluded enforcement actions in terms of commitments to:

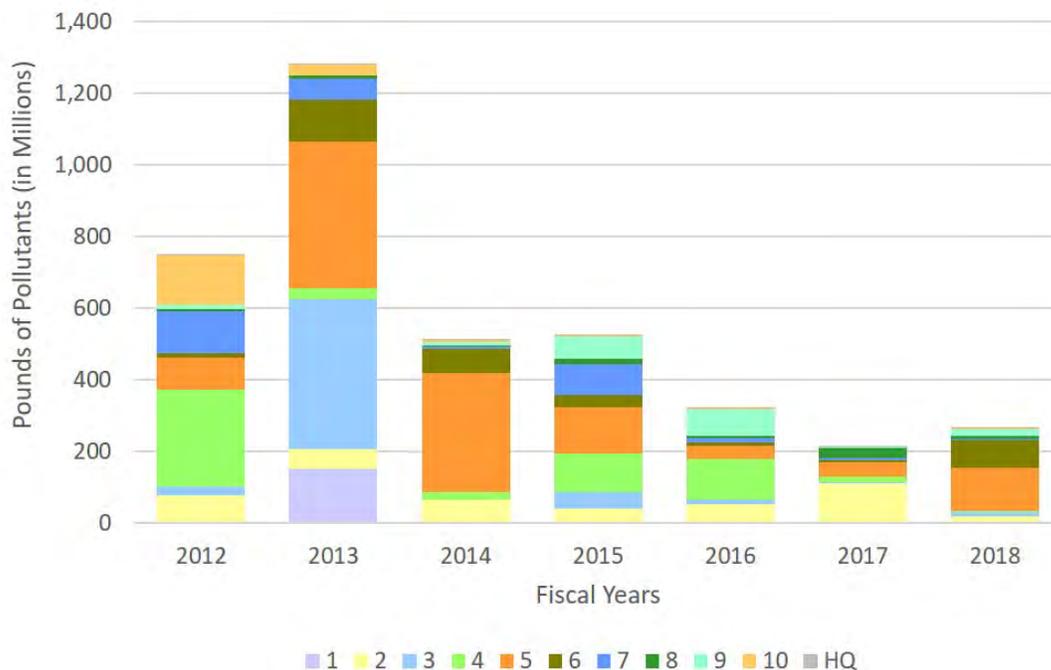
- Reduce, treat, or eliminate pollutants (measured in pounds).
- Treat, minimize, or properly dispose of hazardous and nonhazardous contaminants (measured in pounds).
- Clean up contaminated soil or water (measured in cubic yards).

A few regions accounted for most of the commitments toward these environmental benefits. For example, Region 4 accounted for 75 percent of the pounds from commitments to treat, minimize, or properly dispose contaminants and 29 percent of the cubic yards of contaminated soil or water to be cleaned up.

## Region 5 Accounted for Most Pollutant Commitment Pounds

Overall, the total pounds of pollution commitments decreased from a maximum of 1.2 billion pounds in FY 2013 to a minimum of 215 million pounds in FY 2017 (Figure B-10). Region 5's concluded enforcement actions to reduce, treat, or eliminate pollution accounted for 30 percent of the total 3.9 billion pounds of pollution commitments. The Region 5 total of 1.2 billion pounds was double the second-largest total from Region 4, which reported 563 million pounds. Region 8 and headquarters reported the lowest total pollution commitments, 78.3 and 14.4 million pounds, respectively, together comprising just 2.4 percent of the total. However, Region 1 had the lowest total pounds in five of the seven years. In FY 2013, Region 1 reported 149 million pounds; its seven-year total was only 6 million pounds more at 155 million pounds.

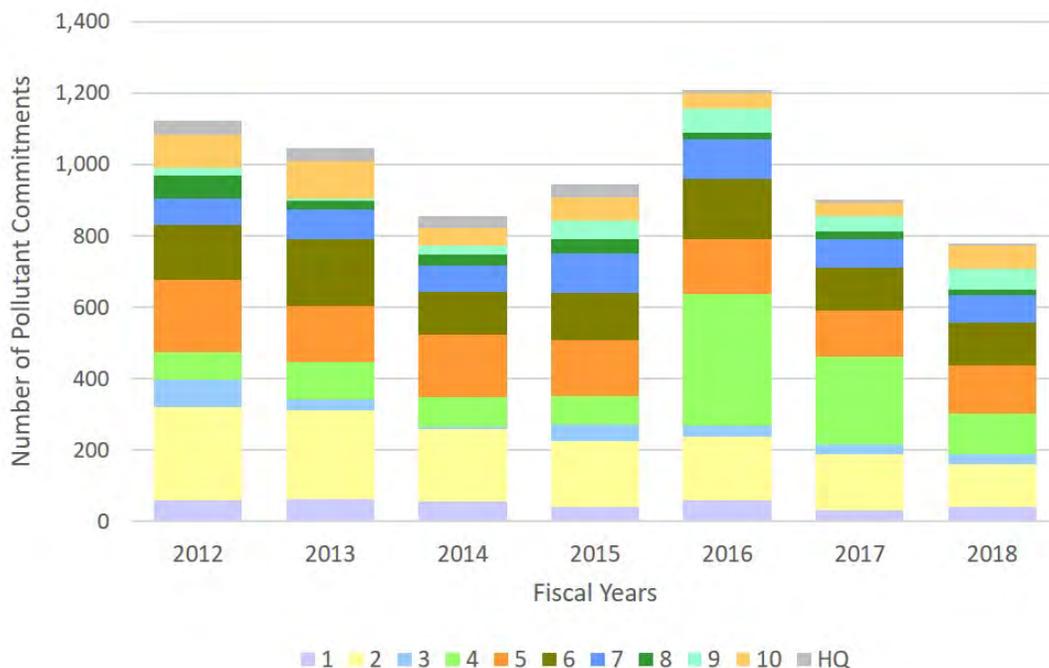
**Figure B-10: Estimated pollutants reduced, treated, or eliminated by EPA region and headquarters, FYs 2012 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

Region 2 reported the most total conclusions with a pollution commitment from FYs 2012 through 2018, accounting for 20 percent of the 6,861 total conclusions (Figure B-11). The Region 2 total of 1,347 conclusions was 21 percent higher than that of Region 5, which reported 1,111 conclusions, the second-most number of conclusions. Region 8's total of 218 conclusions was the fewest over this time period.

**Figure B-11: Enforcement actions with pollutants reduced, treated, or eliminated by EPA region and headquarters, FYs 2012 through 2018**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

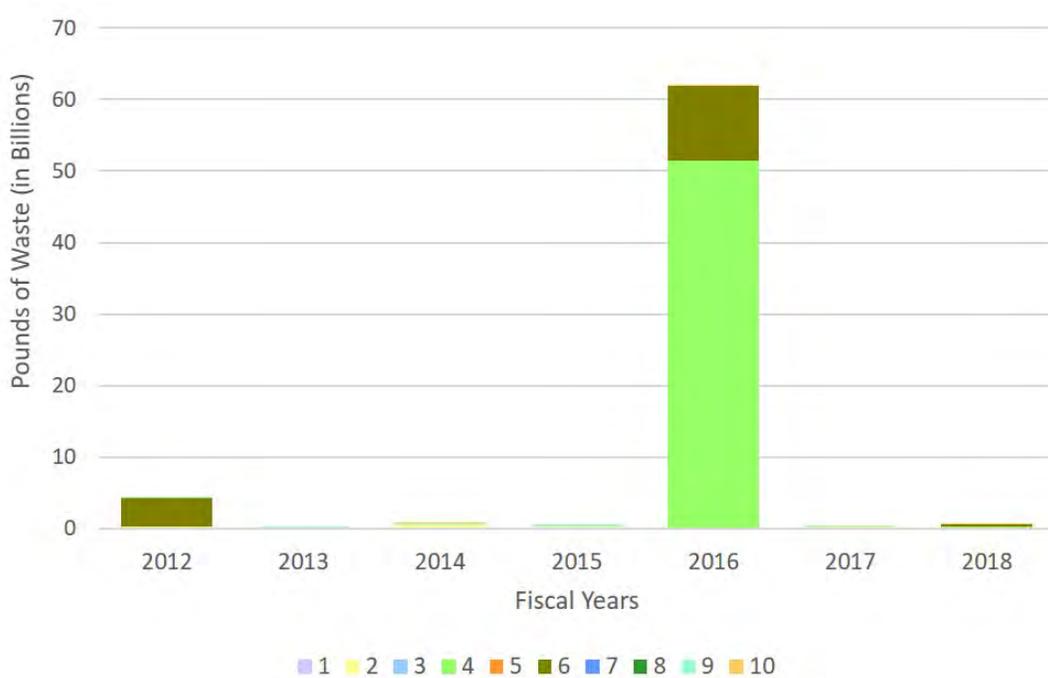
### Pollutant Commitments in FY 2019

In FY 2019, the total number of enforcement actions with pollution commitments increased by 3 percent, or 26 actions. In addition, the total pounds from pollution commitments increased by 19 percent, or by 56.5 million pounds, in FY 2019 relative to FY 2018. Overall, seven regions contributed to the rise in total enforcement actions with pollution commitments cumulatively increasing by 96 commitments. At the same time, three regions and headquarters cumulatively decreased by 70 commitments. Regions 1, 2, 7, 8, and 10 accounted for the rise in total pounds committed, together reporting in an increase of 187.2 million pounds in FY 2019 from FY 2018. The remaining regions—except Region 4, which did not change—and headquarters cumulatively decreased by 130.7 million pounds in FY 2019.

### ***A Single Enforcement Action in Regions 4 and 6 Accounted for Most Waste Commitment Pounds***

Region 4’s concluded actions comprised 75 percent of the total 68.5 billion pounds of waste properly treated, minimized, or disposed while Region 6’s concluded actions made up an additional 22 percent of the total (Figure B-12). However, these commitments were not distributed over the seven years. Rather, large conclusions credited to Region 4 and 6 affected the year-to-year variability in the results. The enforcement action against Mosaic Phosphate, which the EPA concluded in FY 2016 and was credited to [Region 4](#) and [Region 6](#), made up 99 percent of Region 4’s and 70 percent of Region 6’s seven-year total.

**Figure B-12: Estimated hazardous and nonhazardous waste treated, minimized, or properly disposed by EPA region, FYs 2012 through 2018**

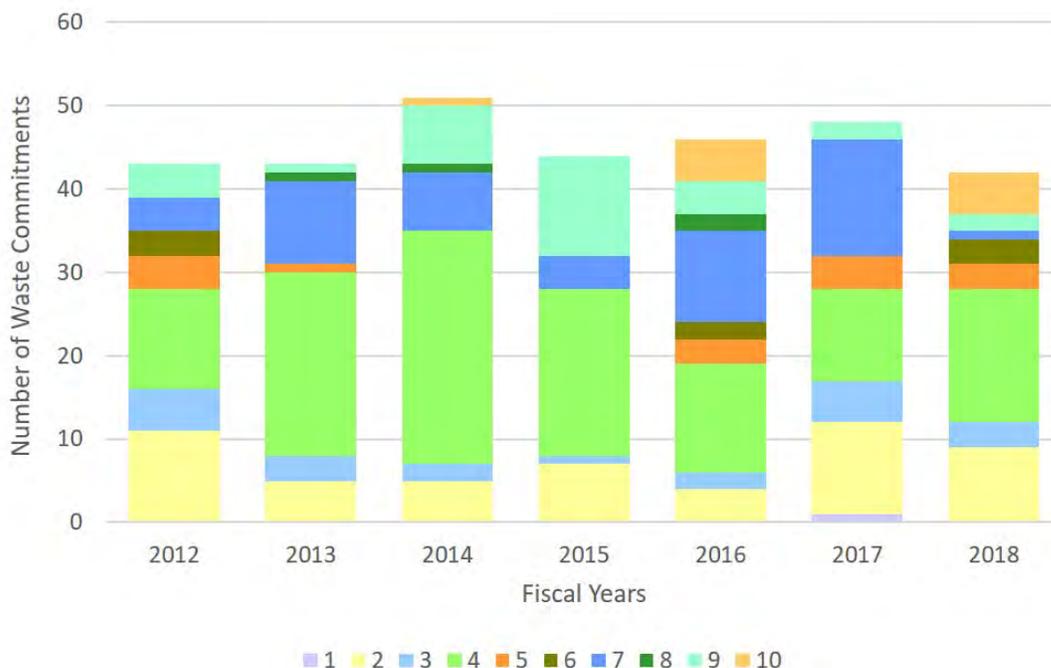


Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

Note: The EPA headquarters reported no waste commitments.

The number of regional concluded actions showed a more consistent trend over time than the total pounds of waste commitments (Figures B-12, above, and B-13, below). Overall, Region 4 concluded the most total concluded actions with a waste commitment from FYs 2012 through 2018 accounting for 122 of the total 317 conclusions. The Region 4 total number of waste commitments was 235 percent higher than Region 2, which recorded 52 conclusions, the second-greatest number of waste commitments. Region 1 concluded just one enforcement action with a waste commitment and the EPA headquarters concluded no enforcement actions with a waste commitment.

**Figure B-13: Enforcement actions with hazardous and nonhazardous waste treated, minimized, or properly disposed by EPA region, FYs 2012 through 2018**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

Note: The EPA headquarters reported no waste commitments.

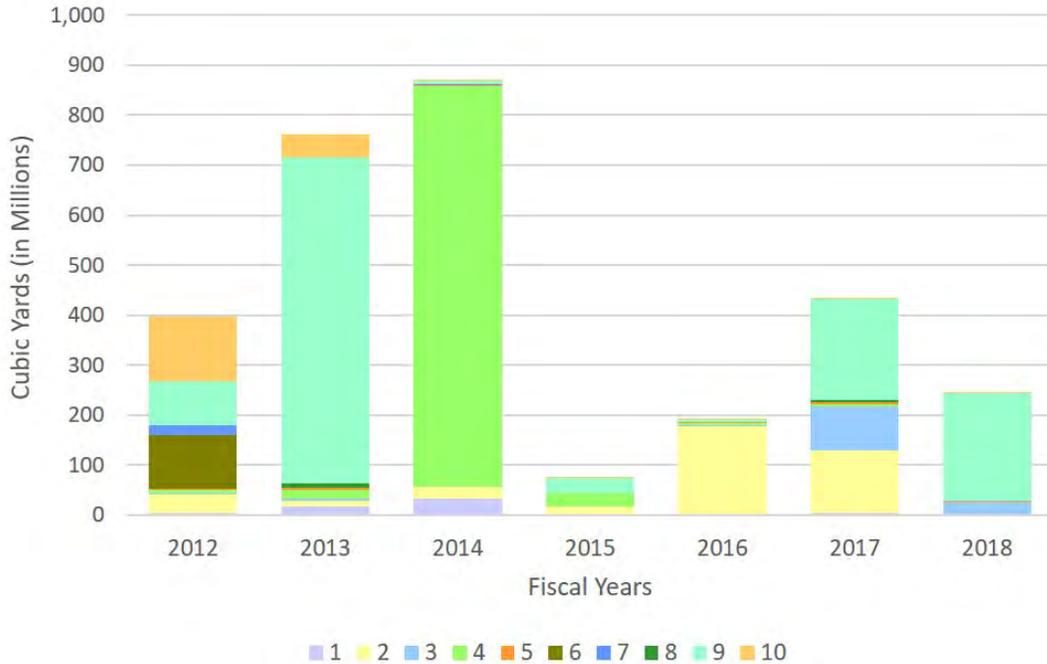
### Waste Commitments in FY 2019

In FY 2019, the number of enforcement actions with waste commitments dropped by 26 percent, from 42 conclusions in FY 2018 to 31 in FY 2019. In addition, the total pounds recorded from waste commitments dropped by 99 percent compared to the 542 million pounds reported in FY 2018. The number and pounds committed decreased or did not change in seven out of ten regions. Regions 4 and 6 together decreased by 532 million pounds, which corresponds to 98 percent of the FY 2018 total. The EPA headquarters did not conclude any enforcement actions with waste commitments in FY 2019.

### **Regions 4 and 9 Accounted for 69 Percent of Cleanup Commitments**

Two regions accounted for a 69 percent of the total volume of contaminated soil or water to be remediated commitments from FYs 2012 through 2018 (Figure B-14). Region 9’s concluded actions made up 40 percent of the total 2.97 billion cubic yards of cleanup commitments. Region 4 made up an additional 29 percent of that total. The annual total volume varied year-to-year based on when large cases concluded. For example, the enforcement action against the [Milan Army Ammunition Plant](#) in FY 2014 generated 797 million cubic yards of cleanup commitments, which were credited to Region 4, and accounted for 96 percent of Region 4’s seven-year total commitment. Regions 5, 7, and 8 had the smallest total commitments, together accounting for 2 percent of the total. Headquarters recorded no cleanup commitments.

**Figure B-14: Estimated contaminated soil and water to be cleaned up by EPA region, FYs 2012 through 2018**

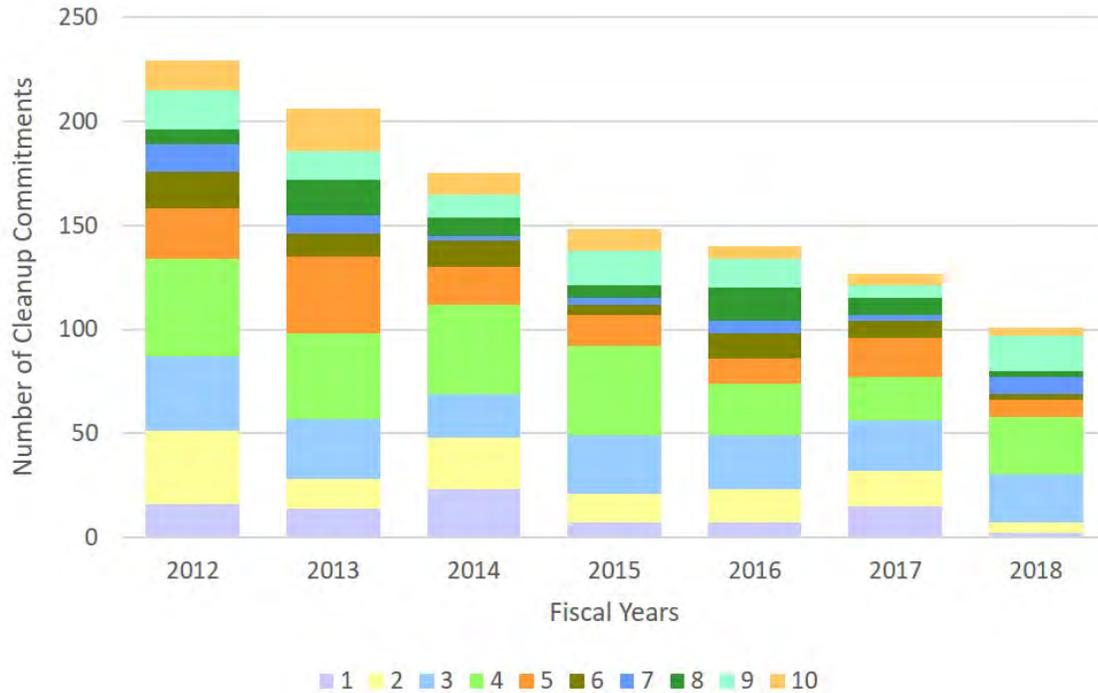


Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

Note: The EPA headquarters reported no cleanup commitments.

The number of regional conclusions with contaminated soil or water to be cleaned up were more consistent than the volumetric totals (Figure B-15). Region 4 reported 22 percent of the 1,126 conclusions with a cleanup commitment between FYs 2012 and 2018 and the largest total. Region 9, despite reporting the largest volume of commitments, accounted for only 9 percent of the number of commitments. Besides headquarters, which had no concluded enforcement actions with cleanup commitments, Region 7 reported the lowest number of cleanup commitments, which was 4 percent of the total.

**Figure B-15: Enforcement actions with contaminated soil and water to be cleaned up by EPA region, FYs 2012 through 2018**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

Note: The EPA headquarters reported no cleanup commitments.

### Cleanup Commitments in FY 2019

In FY 2019, the total volume of cleanup commitments decreased by 95 percent, or 232 million cubic yards, and the number of enforcement actions with cleanup commitments decreased by 22 percent, or 22 actions, relative to FY 2018. The largest decrease by volume occurred in Region 9, where the total volume decreased by 215 million cubic yards accounting for a nearly 100-percent decrease from the previous year. In addition, the total number of concluded actions with cleanup commitments in Region 9 decreased by 14 actions, or 82 percent.

### Region-Specific Summaries of Enforcement Trends Over Time

We prepared specific summaries for each of the EPA’s ten regional offices and for the EPA headquarters.

# Region 1 Enforcement Results (FYs 2007–2018)



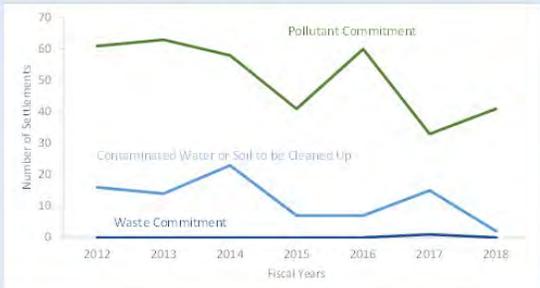
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 1 compliance monitoring activities decreased by 930 activities (53 percent), when comparing FYs 2007 and 2018.
- Region 1 conclusions decreased by 95 actions (52 percent), when comparing FYs 2007 and 2018.

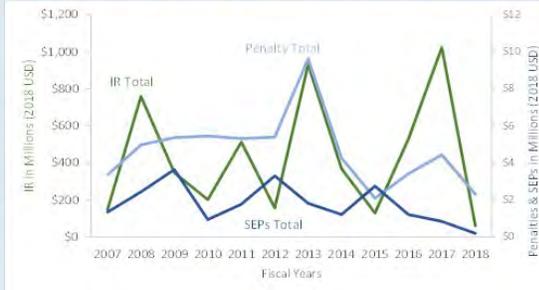
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 1 enforcement actions with pollutant commitments decreased from FYs 2012 (61) through 2018 (41). Region 1 reported 96 percent of its total pounds from pollutant commitments in FY 2013, in enforcement actions against Toll Brothers Inc., and Dominion Energy, Inc.
- Region 1 reported only one enforcement action with a waste commitment (7 pounds) from FYs 2012 through 2018.
- The number of Region 1 enforcement actions with cleanup commitments ranged from two in FY 2018 to 23 in FY 2014. The total cubic yards ranged from 0.002 million to 32.6 million.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 1 had its lowest total penalty amounts in FYs 2015 (\$2.08 million) and 2018 (\$2.30 million).
- Region 1 levied the highest total penalties in FY 2013, with a value of \$9.61 million.

### Injunctive relief

- In FY 2018, Region 1 reported its lowest total amount of injunctive relief (\$60 million), which was 53 percent lower than the next lowest amount (\$129 million) in FY 2015.
- Enforcement actions with large injunctive relief values occurred in FY 2017 against General Electric (\$627 million) and in FY 2008 against Brayton Point (\$582 million).

### Supplemental environmental projects

- Region 1 reported its lowest total value of SEPs in FY 2018 with \$0.2 million
- Region 1 reported high total dollar amounts from SEPs in FYs 2009, 2012, and 2015 ranging from \$2.74 million to \$3.63 million.

## FY 2019 ENFORCEMENT RESULTS

- Region 1 conducted fewer compliance monitoring activities (-319) and concluded more enforcement actions (+24) in FY 2019, relative to FY 2018.
- The value of Region 1 penalties increased (+\$1.95 million), injunctive relief and SEPs remained substantially unchanged, relative to FY 2018.
- Region 1 reported more pounds from pollutant commitments (+1 million), no waste commitments, and cubic yards from cleanup commitments that were substantially unchanged.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 2 Enforcement Results (FYs 2007–2018)



## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 2 compliance monitoring activities decreased by 1,046 activities (36 percent), when comparing FYs 2007 and 2018.
- Region 2 conclusions decreased by 189 actions (41 percent) when comparing FYs 2007 and 2018.

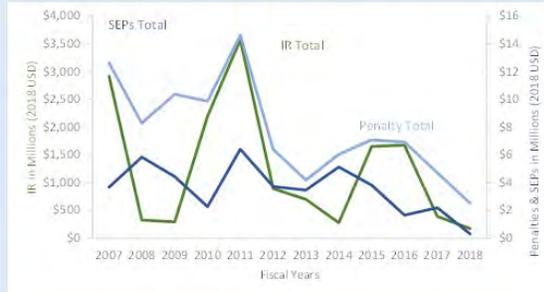
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 2 enforcement actions with pollutant commitments decreased every year from 259 in FY 2012 to 119 in FY 2018. The total pounds ranged from 18.1 million in FY 2018 to 110 million in FY 2017.
- The number of Region 2 enforcement actions with waste commitments ranged from four to 11. The total pounds ranged from 4,454 in FY 2018 to 0.6 million in FY 2014.
- The number of Region 2 enforcement actions with cleanup commitments decreased from 35 actions in FY 2012 to five actions in FY 2018. Region 2 reported 77 percent of its total cubic yards of cleanup commitments in FYs 2016 and 2017.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 2 reported its lowest penalty total in FY 2018, with \$2.51 million.
- Region 2 levied its highest total penalties in FY 2011, with a value of \$14.6 million.

### Injunctive relief

- Region 2 reported its lowest total of injunctive relief of \$174 million in FY 2018.
- Region 2 reported its highest total of injunctive relief of \$3.57 billion in FY 2011.
- Region 2 actions with large injunctive relief values occurred in 2011 against General Electric (\$2.53 billion) and in FY 2010 against the New York DEP (\$1.83 billion).

### Supplemental environmental projects

- Region 2 reported its lowest total value of SEPs in FY 2018 with \$0.31 million.
- The highest total dollar amounts from SEPs occurred in FY 2011 with \$6.41 million.

## FY 2019 ENFORCEMENT RESULTS

- Region 2 conducted fewer compliance monitoring activities (-198) and concluded fewer enforcement actions (-33) in FY 2019, compared to FY 2018.
- The value of Region 2 penalties increased (+\$2.08 million), injunctive relief increased (+\$1.80 billion), and SEPs remained substantially unchanged, relative to FY 2018.
- Region 2 reported more pounds from pollutant commitments (+72 million), fewer pounds from waste commitments (-4.2 million), and more cubic yards from cleanup commitments (+2 million).

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 3 Enforcement Results (FYs 2007–2018)



## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 3 compliance monitoring activities increased by 1,626 from FYs 2007 to 2008 and decreased by 1,288 activities from FYs 2008 to 2018.
- Region 3 conclusions decreased by 189 actions (41 percent) when comparing FY 2007 and FY 2018.

## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)

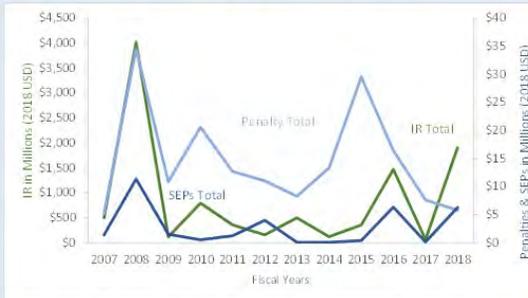


Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 3 enforcement actions with pollutant commitments decreased sharply from 77 in FY 2012 to seven in FY 2014 and remained steady around 30 from FYs 2016 through 2018. Region 3 reported 80 percent of its total pounds from pollutant commitments in FY 2013.
- The number of Region 3 enforcement actions with waste commitments remained steady, ranging from one to five commitments. Region 3 accounted for less than 1 percent of the total pounds committed by all the regions from FYs 2012 through 2018.
- The number of Region 3 enforcement actions with cleanup commitments decreased every year, except from FYs 2014 to 2015. Region 3 cleanup commitments ranged from 147,000 cubic yards in FY 2014 to 87 million in FY 2017.

Source: OIG analysis of EPA’s annual enforcement data. (EPA OIG image)

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 3 reported its lowest total penalty amounts in FYs 2007 (\$5.17 million) and 2018 (\$5.78 million).
- Region 3 levied the highest total penalties in FYs 2008 (\$34.5 million) and 2015 (\$29.5 million).

### Injunctive relief

- Region 3 reported its lowest total of injunctive relief of \$64 million in FY 2017.
- Region 3 reported its highest total of injunctive relief of \$4.01 billion in FY 2008.
- Region 3 concluded two actions with large injunctive relief values in FY 2008: American Electric Power (\$2.23 billion) and ALCOSAN (\$1.62 billion).

### Supplemental environmental projects

- Region 3 reported SEP values below \$0.2 million in FYs 2013, 2014, 2015, and 2017.
- The highest total dollar amounts from SEPs occurred in FY 2008 with \$11.3 million.

## FY 2019 ENFORCEMENT RESULTS

- Region 3 conducted fewer compliance monitoring activities (–12) and concluded fewer enforcement activities (–24) in FY 2019, compared to FY 2018.
- The value of Region 3 penalties increased (+\$4.45 million), injunctive relief decreased (–\$1.86 billion), and SEPs decreased (–\$5.99 million), relative to FY 2018.
- Region 3 reported fewer pounds from pollutant commitments (–10 million), pounds of waste commitments that were substantially unchanged, and fewer cubic yards from cleanup commitments (–26 million).

# Region 4 Enforcement Results (FYs 2007–2018)



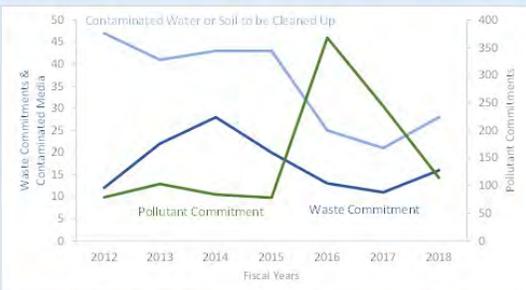
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 4 compliance monitoring activities increased by 1,374 from FYs 2007 through 2009 and decreased by 1,570 from FYs 2009 through 2018.
- Region 4 conclusions decreased by 371 actions (65 percent) when comparing FYs 2007 and 2018.

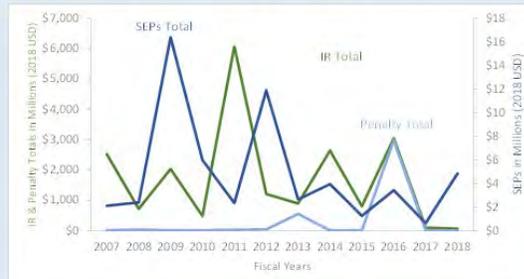
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 4 enforcement actions with pollutant commitments varied, ranging from 79 to 368. The total pounds from pollutant commitments ranged from 4.3 million in FY 2018 to 270 million in FY 2012.
- The number of Region 4 enforcement actions with waste commitments varied, ranging from 11 to 28. Region 4 reported 99 percent of its total 51.5 million pounds of waste commitments in FY 2016.
- The number of Region 4 enforcement actions with cleanup commitments ranged between 21 and 47. Region 4 reported 93 percent of its total 859 million cubic yards of cleanup commitments from an enforcement action against Milan Army Ammunition Plant in FY 2014.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 4 reported its lowest total penalties in FY 2018, with \$3.98 million.
- Enforcement actions against BP Exploration accounted for \$538 million and \$2.9 billion in penalties in FYs 2013 and 2016, respectively.

### Injunctive relief

- Region 4 reported its lowest total of injunctive relief of \$64 million in FY 2018.
- Region 4 reported its highest total of injunctive relief of \$6.06 billion in FY 2011.
- A concluded action against the Tennessee Valley Authority recorded \$5.59 billion in injunctive relief in FY 2011.

### Supplemental environmental projects

- Region 4 reported its lowest total value of SEPs in FY 2017 with \$640,000.
- The highest total dollar amounts from SEPs occurred in FYs 2009 with \$16.4 million and 2012 with \$11.9 million.

## FY 2019 ENFORCEMENT RESULTS

- Region 4 conducted fewer compliance monitoring activities (-69) and concluded fewer enforcement actions (-31) in FY 2019, compared to FY 2018.
- The value of Region 4 penalties increased (+\$1.65 million), injunctive relief remained substantially unchanged, and SEPs decreased (-\$1.25 million) relative to FY 2018.
- Region 4 reported pounds of pollutant commitments that were substantially unchanged, fewer pounds from waste commitments (-245 million), and more cubic yards from cleanup commitments (+6 million).

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 5 Enforcement Results (FYs 2007–2018)



## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 5 compliance monitoring activities increased from 1,518 in FY 2007 to 4,706 in FY 2012, then decreased to 1,210 in FY 2018.
- Region 5 conclusions decreased by 107 actions (33 percent) when comparing FYs 2007 and 2018.

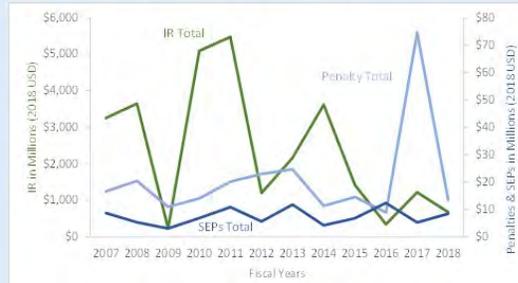
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 5 enforcement actions with pollutant commitments decreased most years from FYs 2012 (201) through 2018 (134). The total pounds from pollutant commitments ranged from 35.4 million in FY 2016 to 408 million in FY 2013.
- The number of Region 5 enforcement actions with waste commitments ranged from zero to four. Region 5 accounted for less than 1 percent of the total pounds reported by all the regions from FYs 2012 through 2018.
- The number of Region 5 enforcement actions with cleanup commitments ranged from eight to 37. Region 5 cleanup commitments ranged from 890,000 cubic yards in FY 2007 to 5.6 million cubic yards in FY 2017.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 5 reported its lowest penalty total in FY 2016, with \$8.95 million.
- Region 5 levied its highest total penalties in FY 2017, with a value of \$74.5 million that largely stemmed from an action against Enbridge Energy.

### Injunctive relief

- Region 5 reported its lowest total of injunctive relief of \$235 million in FY 2009.
- Region 5 reported its highest total of injunctive relief of \$5.47 billion in FY 2011.
- Region 5 concluded actions with large injunctive relief values against NEORDS Cleveland (\$3.35 billion) in FY 2011 and Muskingum River Station (\$2.88 billion) in FY 2008.

### Supplemental environmental projects

- Region 5 reported its lowest total value of SEPs in FY 2009 with \$3.05 million.
- The highest total dollar amounts from SEPs occurred in FYs 2013 with \$11.8 and 2016 with \$12.4 million.

## FY 2019 ENFORCEMENT RESULTS

- Region 5 conducted more compliance monitoring activities (+86) and concluded fewer enforcement actions (-17) in FY 2019, compared to FY 2018.
- The value of Region 5 penalties decreased (-\$1.15 million), injunctive relief remained substantially unchanged, and SEPs decreased (-\$3.32 million), relative to FY 2018.
- Region 5 reported fewer pounds from pollutant commitments (-41 million), pounds of waste commitments that were substantially unchanged, and more cubic yards from cleanup commitments (+2 million).

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 6 Enforcement Results (FYs 2007–2018)



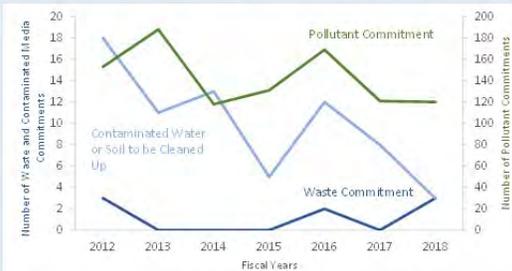
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 6 compliance monitoring activities increased by 789 from FYs 2007 through 2010, then decreased 1,636 from FYs 2010 through 2018.
- Region 6 conclusions decreased by 330 actions (48 percent) when comparing FYs 2007 and 2018.

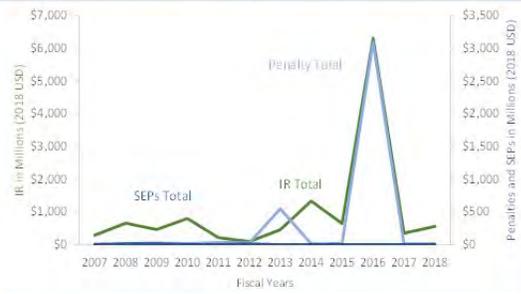
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 6 enforcement actions with pollutant commitments ranged between 118 and 188. The total pounds ranged from 5.6 million in FY 2017 to 117 million in FY 2013.
- The number of Region 6 enforcement actions with waste commitments ranged from zero to three. In FY 2016, Region 6 reported 10.5 billion pounds out of its seven-year total of 15 billion pounds from an enforcement action against Mosaic Phosphates, Inc.
- The number of Region 6 enforcement actions with cleanup commitments decreased from 18 in FY 2012 to three in FY 2018. In FY 2012, Region 6 reported 97 percent of its seven-year total cubic yards from an enforcement action against Johnny M Mine.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 6 reported its lowest penalty total in FY 2007, with \$8.28 million.
- An enforcement action against BP Exploration accounted for \$538 million and \$2.9 billion in penalties in FYs 2013 and 2016, respectively.

### Injunctive relief

- Region 6 reported its lowest total of injunctive relief of \$95.5 million in FY 2012.
- Region 6 reported its highest total of injunctive relief of \$6.3 billion in FY 2016.
- Region 6 concluded an action with a large injunctive relief value against BP Exploration (\$6.09 billion) in FY 2016.

### Supplemental environmental projects

- Region 6 reported its lowest total value of SEPs in FY 2013 with \$190,000.
- The highest total dollar amounts from SEPs occurred in FY 2009 with \$13.7 million, followed by \$11.6 million in FY 2012.

## FY 2019 ENFORCEMENT RESULTS

- Region 6 conducted more compliance monitoring activities (+134) and concluded fewer enforcement actions (-43) in FY 2019, relative to FY 2018.
- The value of Region 6 penalties decreased (-\$0.67 million), injunctive relief decreased (-\$0.55 billion) and SEPs increased (+\$0.85 million), relative to FY 2018.
- Region 6 reported fewer pounds from pollutant commitments (-73 million), fewer pounds from waste commitments (-287 million), and cubic yards of cleanup commitments that were substantially unchanged.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 7 Enforcement Results (FYs 2007–2018)



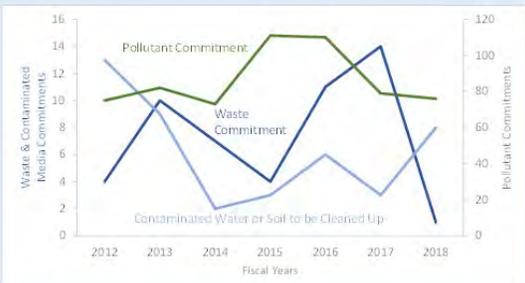
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 7 compliance monitoring activities decreased by 541 (49 percent) when comparing FYs 2007 and 2018.
- Region 7 conclusions decreased by 130 actions (48 percent) when comparing FYs 2007 and 2018.

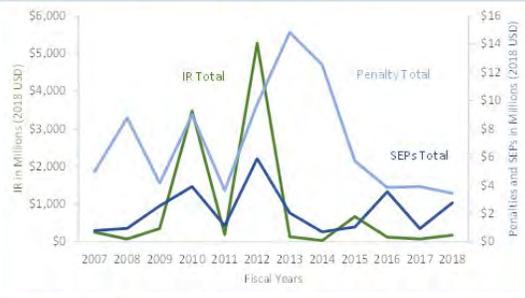
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 7 enforcement actions with pollutant commitments ranged between 73 and 111. The total pounds ranged from 2.2 million in FY 2018 and 116 million in FY 2012.
- The number of Region 7 enforcement actions with waste commitments ranged between one and 14. Region 7 accounted for less than 1 percent of the total 68.5 billion pounds of waste commitments reported by the regions.
- The number of Region 7 enforcement actions with cleanup commitments ranged between two and 13. In FY 2012, Region 7 reported 88 percent of its total cubic yards, from an enforcement action against Eaton Corporation.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 7 reported its lowest penalty total in FY 2011 with \$3.66 million.
- Region 7 levied its highest penalty total in FY 2013 with \$14.8 million.

### Injunctive relief

- Region 7 reported its lowest total of injunctive relief of \$34 million in FY 2014.
- Region 7 reported its highest total of injunctive relief of \$5.3 billion in FY 2012.
- Region 7 concluded actions with large injunctive relief values against Metropolitan Sewer District St. Louis (\$5.13 billion) in FY 2012 and against the City of Kansas (\$2.73 billion) in FY 2010.

### Supplemental environmental projects

- Region 7 reported its lowest total value of SEPs in FY 2014 with \$710,000.
- The highest total dollar amounts from SEPs occurred in FY 2012 with \$5.88 million.

## FY 2019 ENFORCEMENT RESULTS

- Region 7 conducted more compliance monitoring activities (+95) and concluded fewer enforcement actions (-13) in FY 2019 relative to FY 2018.
- The value of Region 7 penalties decreased (-\$1.32 million), injunctive relief increased (+\$0.82 billion), and SEPs decreased (-\$1.26 million) relative to FY 2018.
- Region 7 reported more pounds from pollutant commitments (+73 million), pounds of waste commitments that were substantially unchanged, and fewer cubic yards of cleanup commitments (-1 million).

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 8 Enforcement Results (FYs 2007–2018)



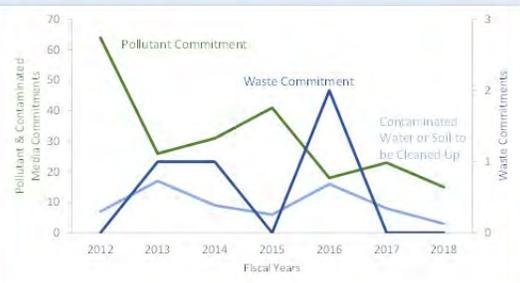
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 8 compliance monitoring activities decreased by 721 (42 percent) when comparing FYs 2007 and 2018.
- Region 8 conclusions decreased by 69 actions (43 percent) when comparing FYs 2007 and 2018.

## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 8 enforcement actions with pollutant commitments decreased most years from FYs 2012 (64) through 2018 (15). The total pounds ranged from 2.8 million in FY 2014 to 29.5 million in FY 2017.
- From FYs 2012 through 2018, Region 8 completed only four enforcement actions with waste commitments and accounted for less than 1 percent of pounds committed nationally.
- The number of Region 8 enforcement actions with cleanup commitments ranged between three and 17. Region 8 reported 55 and 33 percent of its total cubic yards in FYs 2013 and 2017, respectively.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 8 reported its lowest penalty total in FY 2007, with \$910,000.
- Region 8 levied its highest penalty total in FY 2012 with \$7.71 million.
- Region 8 accounted for the smallest percentage (0.5 percent) of penalties across all the regions from FYs 2007 through 2018.

### Injunctive relief

- Region 8 reported its lowest total of injunctive relief of \$18 million in FY 2017.
- Region 8 reported its highest total of injunctive relief of \$562 million in FY 2008.
- Region 8 accounted for the smallest percentage (1.1 percent) of injunctive relief across all the regions from FYs 2007 through 2018.

### Supplemental environmental projects

- Region 8 reported its lowest total value of SEPs in FY 2007 with \$30,000, followed by \$51,000 in FY 2017.
- The highest total dollar amounts from SEPs occurred in FY 2015 with \$2.16 million.

## FY 2019 ENFORCEMENT RESULTS

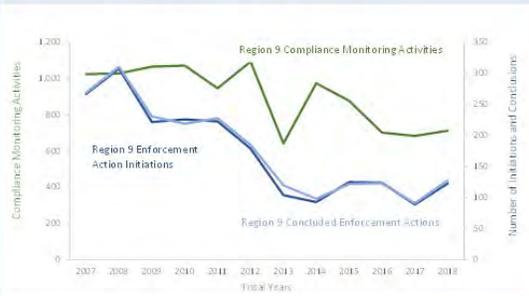
- Region 8 conducted fewer compliance monitoring activities (-140) and concluded more enforcement actions (+12) in FY 2019, relative to FY 2018.
- The value of Region 8 penalties, injunctive relief and SEPs remained substantially unchanged, relative to FY 2018.
- Region 8 reported more pounds from pollutant commitments (+29 million) and pounds of waste commitments and cubic yards of cleanup commitments that were substantially unchanged.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 9 Enforcement Results (FYs 2007–2018)



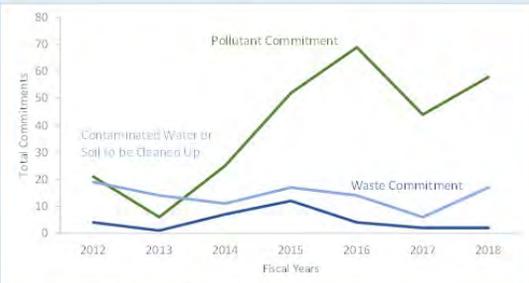
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 9 compliance monitoring activities decreased by 313 (30 percent) when comparing FYs 2007 and 2018.
- Region 9 conclusions decreased by 141 actions (52 percent) when comparing FYs 2007 and 2018.

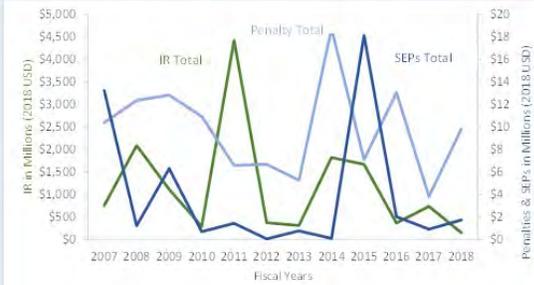
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 9 enforcement actions with pollutant commitments increased most years from 21 in FY 2012 to 58 in FY 2018. The total pounds ranged from 0.1 million in FY 2013 to 74 million in FY 2014.
- The number of Region 9 enforcement actions with waste commitments ranged between one and 12. Region 9 accounted for less than 1 percent of the total 68.5 billion pounds of waste commitments reported nationally.
- Region 9 enforcement actions with cleanup commitments ranged between six and 19. The total cubic yards reported by Region 9 ranged from 3.7 million in FY 2016 to 652 million in FY 2013. Region 9 accounted for 40 percent of the total cubic yards committed nationally.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 9 reported its lowest penalty total in FY 2017 with \$3.81 million.
- Region 9 levied its highest penalty total in FY 2014 with \$18.7 million.

### Injunctive relief

- Region 9 reported its lowest total of injunctive relief of \$149 million in FY 2018.
- Region 9 reported its highest total of injunctive relief of \$4.4 billion in FY 2011.
- Region 9 concluded an action with a large injunctive relief value against the city and county of Honolulu (\$4.1 billion) in FY 2011.

### Supplemental environmental projects

- Region 9 reported its lowest total value of SEPs in FY 2012 with \$40 thousand.
- The highest total dollar amounts from SEPs occurred in FY 2015 with \$18.1 million, followed by \$13.2 million in FY 2007.

## FY 2019 ENFORCEMENT RESULTS

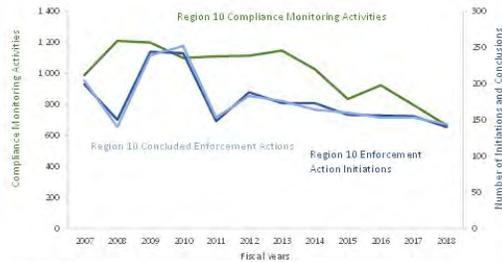
- Region 9 conducted more compliance monitoring activities (+110) and concluded more enforcement actions (+9) in FY 2019 relative to FY 2018.
- The value of Region 9 penalties decreased (-\$3.77 million), injunctive relief remained substantially unchanged, and SEPs increased (+\$5.59 million) relative to FY 2018.
- Region 9 reported fewer pounds from pollutant commitments (-3.8 million), pounds of cleanup commitments that were substantially unchanged, and fewer cubic yards of cleanup commitments (-215 million).

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Region 10 Enforcement Results (FYs 2007–2018)



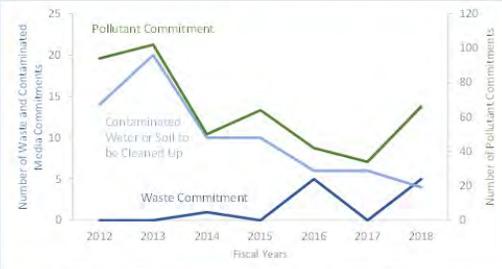
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 10 compliance monitoring activities increased by 221 from FYs 2007 to 2008 and decreased by 545 from FYs 2008 through 2018.
- Region 10 conclusions decreased by 60 (29 percent) when comparing FYs 2007 and 2018.

## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of Region 10 enforcement actions with pollutant commitments decreased from FYs 2012 (94) through 2018 (66). The total pounds also decreased from 140 million in FY 2012 to 3.1 million in FY 2018.
- The number of Region 10 enforcement actions with waste commitment ranged from zero to five. Region 10 accounted for less than 1 percent of the total 68.5 billion pounds of waste commitments reported nationally.
- Region 10 enforcement actions with cleanup commitments ranged between 4 and 20. Region 10 total cubic yards from cleanup commitments decreased from 129 million in FY 2012 to 20,000 in FY 2018.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- Region 10 reported its lowest penalty total in FY 2017 with \$2.05 million.
- Region 10 levied its highest penalty total in FY 2011 with \$28.5 million.
- A consent decree with BP Exploration (Alaska) in FY 2011 resulted in \$22.9 million in penalties.

### Injunctive relief

- Region 10 reported its lowest total of injunctive relief of \$30 million in FY 2017.
- Region 10 reported its highest total of injunctive relief of \$1.6 billion in FY 2013.
- Region 10 concluded actions with large injunctive relief values against King County Washington (\$764 million) and against the city of Seattle (\$646 million) in FY 2013.

### Supplemental environmental projects

- Region 10 reported its lowest total value of SEPs in FY 2012 with \$100,000.
- The highest total dollar amounts from SEPs occurred in FY 2008 with \$2 million, followed by \$1.7 million in FY 2018.

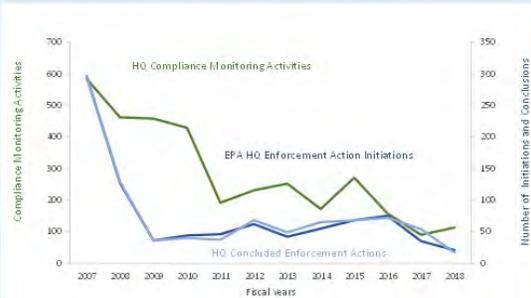
## FY 2019 ENFORCEMENT RESULTS

- Region 10 conducted fewer compliance monitoring activities (-82) and concluded fewer enforcement actions (-17) in FY 2019 relative to FY 2018.
- The value of Region 10 penalties decreased (-\$1.11 million), injunctive relief remained substantially unchanged, and SEPs increased (+\$2.09 million) relative to FY 2018.
- Region 10 reported more pounds from pollutant commitments (+8.4 million) and pounds of waste commitments and cubic yards of cleanup commitments that were substantially unchanged.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# EPA Headquarters Enforcement Results (FYs 2007–2018)

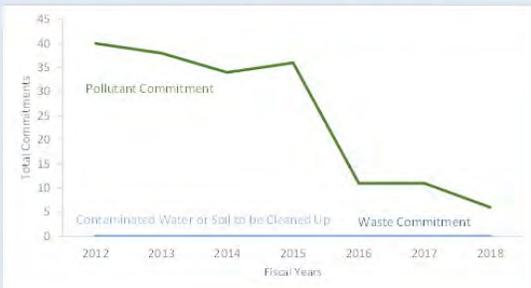
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of EPA headquarters compliance monitoring activities decreased by 471 (81 percent) when comparing FYs 2007 and 2018.
- EPA headquarters conclusions decreased by 259 actions comparing FYs 2007 and 2009 and overall decreased by 278 (94 percent) when comparing FYs 2007 and 2018.

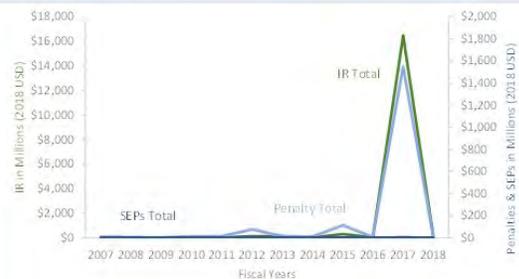
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The number of EPA headquarters enforcement actions with pollutant commitments decreased most years from FYs 2012 (40) through 2018 (six). The total pounds varied from 0.6 million in FY 2016 to 3.4 million in FY 2018.
- EPA headquarters reported no enforcement actions with waste commitments from FYs 2012 through 2018.
- EPA headquarters reported no enforcement actions with cleanup commitments from FYs 2012 through 2018.

## CONCLUDED ENFORCEMENT ACTIONS WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- EPA headquarters reported its lowest penalty total in FY 2009 with \$3.25 million.
- EPA headquarters levied its highest penalty total in FY 2017 with \$1.55 billion.
- An enforcement action against Volkswagen in FY 2017 resulted in \$1.48 billion in penalties.

### Injunctive relief

- EPA headquarters reported its lowest total of injunctive relief of \$2 million in FY 2009.
- EPA headquarters reported its highest total of injunctive relief of \$16.4 billion in FY 2017.
- EPA headquarters concluded an action with a large injunctive relief value against Volkswagen (\$16.3 billion) in FY 2017.

### Supplemental environmental projects

- EPA headquarters reported no dollars from SEPs in six of the 12 fiscal years.
- The highest total dollar amounts from SEPs occurred in FY 2017 with \$2.8 million.

## FY 2019 ENFORCEMENT RESULTS

- EPA headquarters conducted fewer compliance monitoring activities (-11) and concluded fewer enforcement actions (-3) in FY 2019 relative to FY 2018.
- The value of EPA headquarters penalties increased (+\$282 million) and injunctive relief remained substantially unchanged relative to FY 2018.
- EPA headquarters reported no value from SEPs in FY 2019.
- EPA headquarters reported fewer pounds from pollutant commitments (-2.7 million) and no waste or cleanup commitments in FY 2019.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

## ***Enforcement Trends by Environmental Statute***

This appendix presents the trends in the EPA's annual enforcement results for FYs 2007 through 2018 by environmental statute to a greater degree than in Chapter 2. As with the national analyses, we removed FY 2006 results from our analyses of environmental statutes after determining that the anomalously high number of concluded enforcement actions in FY 2006 masked the overall trends. We also provide a postscript in each section by comparing the FY 2019 results to those of FY 2018. The eight environmental statutes analyzed included the CAA, CERCLA, CWA (including the Oil Pollution Act), EPCRA, FIFRA, RCRA, SDWA, and TSCA. Enforcement actions concluded under these eight environmental statutes represent 99.9 percent of the total enforcement cases that the EPA concluded during the 12-year time frame. Our analysis of three types of environmental benefits only extends back to FY 2012, the year that the EPA started reporting these benefits in a consistent manner. This appendix also includes one-page summaries of the enforcement trends for each of the eight statutes included in our analyses.

Throughout this appendix, we provide weblinks to EPA enforcement case summaries for the convenience of the reader who wishes to learn more about these cases. The enforcement results reported in some of these case summaries vary from those that we calculated from the data we retrieved from OECA's internal Federal Enforcement and Compliance Dashboard because we adjusted all monetary enforcement results to 2018 USD.

### **EPA's Compliance Monitoring, Enforcement Actions, and Enforcement Results for Most Environmental Statutes Generally Declined**

Enforcement trends within statutes generally followed the declining national trends for:

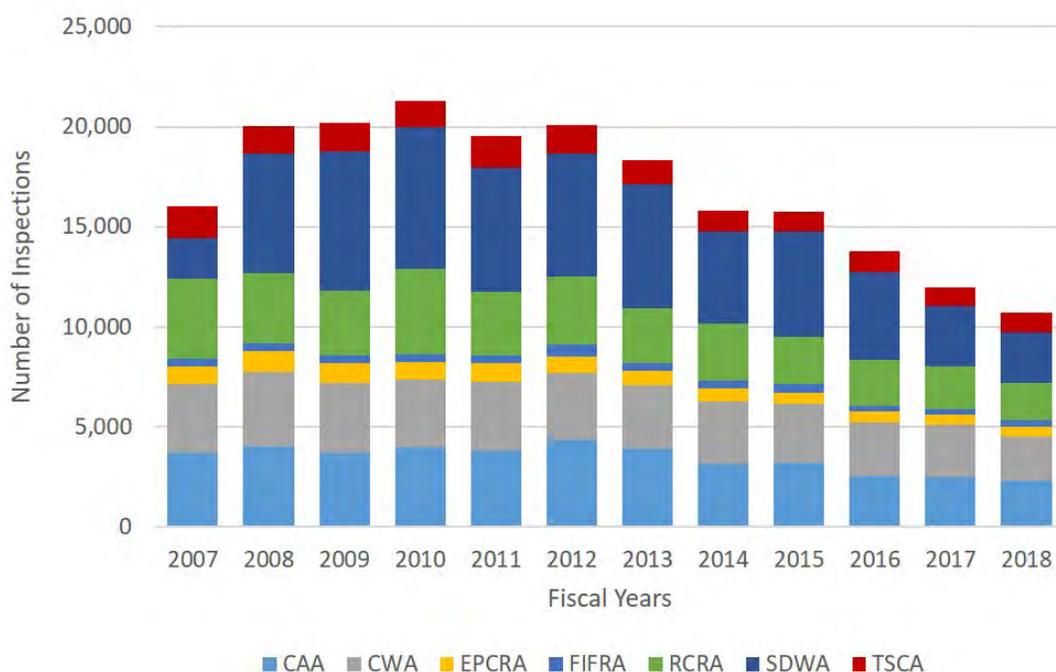
- Compliance monitoring activities.
- Enforcement actions initiated and concluded.
- Enforcement results.
- Environmental benefits.

The CAA and CWA represented the majority of compliance monitoring activities and enforcement actions initiated and concluded over time and, as a result, greatly influenced the trends in enforcement results, such as injunctive relief, penalties, and supplemental environmental projects. For environmental benefits, the CAA and CWA enforcement actions greatly influenced commitments to reduce, treat, or eliminate pollutants, while RCRA and CERCLA-concluded enforcement actions influenced commitments to treat, minimize, or properly dispose of hazardous and nonhazardous waste and commitments to clean up contaminated soil and water, respectively. Large enforcement actions influenced trends in enforcement results and environmental benefits within statutes and over time.

## EPA's Compliance Monitoring Activities Within Statutes Decreased

The EPA reported the number of compliance monitoring activities conducted under seven statutes: CAA, CWA, EPCRA, FIFRA, RCRA, SDWA, and TSCA. SDWA compliance monitoring activities accounted for 30 percent of the total activities conducted under the seven statutes (60,470 of 203,389) from FYs 2007 through 2018. Other significant statutes for compliance monitoring activities included the CAA with 20 percent (41,104), the CWA with 19 percent (37,642), and RCRA with 18 percent (35,790). Compliance monitoring activities conducted under the other three statutes—EPCRA, FIFRA and TSCA—accounted for 14 percent of the Agency total from FYs 2007 through 2018. As illustrated in Figure C-1, SDWA results also exhibit the most annual variability in the number of compliance monitoring activities reported.

**Figure C-1: Total compliance monitoring activities by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

The increase in SDWA compliance monitoring activities from FYs 2007 through 2010 masked the trends for most of the other statutes, which either decreased over the entire period or remained stable and then decreased (Figure C-1). The number of CAA compliance monitoring activities remained relatively steady until FY 2013, with an average total of 3,913 from FYs 2007 through 2013, but decreased nearly every year through FY 2018. CWA compliance monitoring activities declined nearly every year, except FY 2008, when the total increased by 8-percent, and FY 2011, which experienced a slight increase. RCRA compliance monitoring activities also steadily declined over this time period, except for a 32-percent increase in FY 2010 (an increase of 1,046 activities) and small increases in FY 2012 and FY 2014. Similarly, the trends in the number of compliance monitoring activities for the other three

statutes, EPCRA, FIFRA and TSCA, varied but declined in most years from FYs 2007 through 2018.

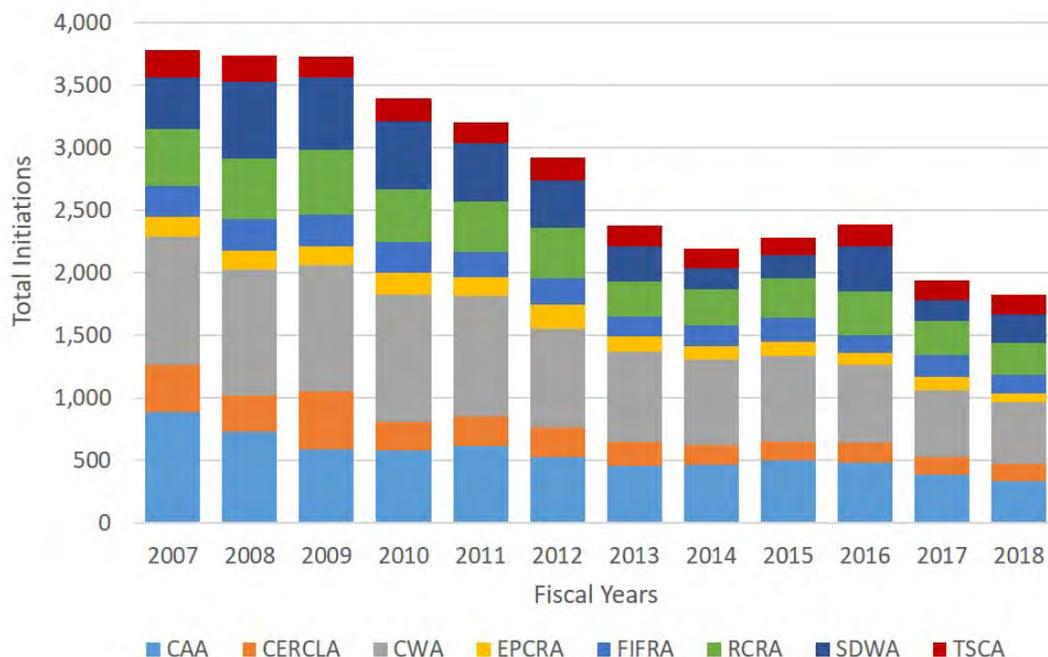
### Compliance Monitoring Activities in FY 2019

In FY 2019, the number of compliance monitoring activities continued to decrease for five of the seven statutes, but the net rate of decline slowed. The largest decreases between FYs 2018 and 2019 occurred under the CAA and SDWA authorities. CAA compliance monitoring activities decreased by 329, or 14 percent, compared to a 5-percent average decline from FYs 2010 through 2018. SDWA compliance monitoring activities decreased by 117, or 5 percent, compared to an 11-percent average decline from FYs 2010 through 2018. The CWA was the only statute that experienced a substantial increase in the number of compliance monitoring activities between FYs 2018 and 2019. CWA compliance monitoring activities increased by 194, a 9-percent increase, compared to a 5 percent average decline from FYs 2010 through 2018. The number of compliance monitoring activities conducted under RCRA remained steady from FYs 2018 through 2019.

### EPA Initiated Fewer Enforcement Actions Within Statutes

From FYs 2007 through 2018, the EPA initiated nearly half (48 percent) of the total enforcement actions under two statutes: the CAA and the CWA (Figure C-2). Similarly, one or two statutes accounted for much of the large decreases in total initiations, which occurred in FYs 2013 and 2017. In FY 2013, 40 percent of the total reduction of initiations were in RCRA or SDWA. In FY 2017, 43 percent of the net decrease in total initiations occurred in the SDWA alone.

**Figure C-2: Civil enforcement cases initiated by the EPA by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

The number of enforcement actions initiated under all statutes decreased when comparing FYs 2007 and 2018. The number of enforcement actions initiated under the CAA declined every year from FYs 2007 (with 887 initiations) through 2018 (with 329 initiations), except FYs 2011, 2014, and 2015. Aside from a slight increase in FY 2010, the number of CWA initiations decreased each year from FYs 2007 through 2018, from 1,031 to 492.

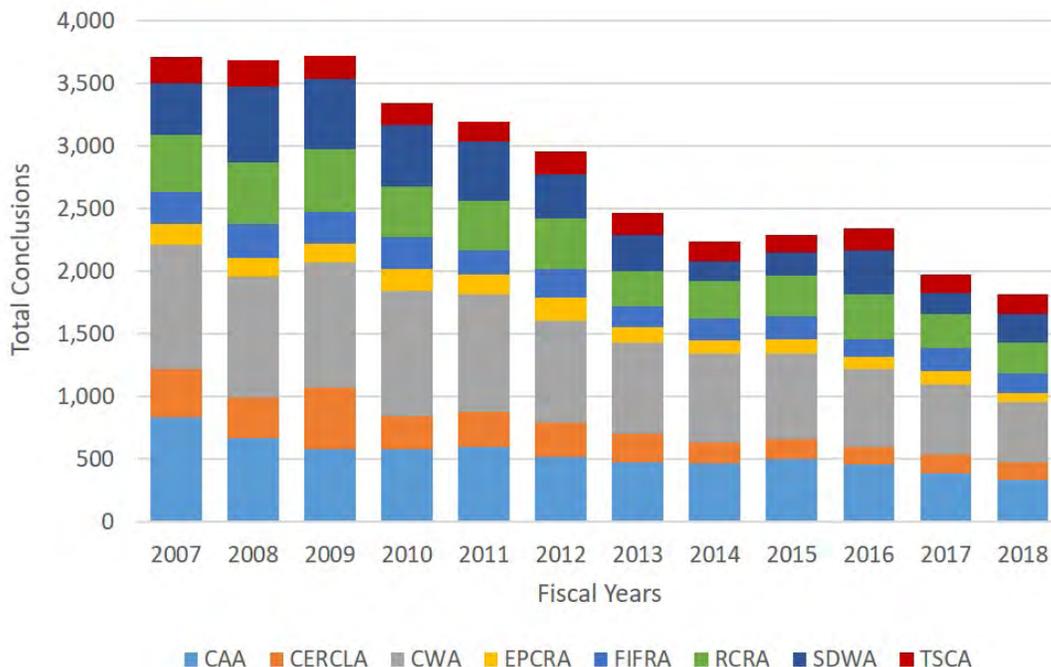
### Initiated Enforcement Actions in FY 2019

Overall, the number of initiated enforcement actions decreased by 8 percent in FY 2019 in comparison to FY 2018. The largest decreases in initiations occurred under the CWA and SDWA, which decreased by 48 and 36, respectively. Together, the CWA and SDWA accounted for more than half (55 percent) of the decline from FY 2018. The number of enforcement actions initiated under the CAA increased by 14, a slight increase of 4 percent from FY 2018.

### EPA Concluded Fewer Enforcement Actions Within Statutes

The EPA concluded 51 percent fewer enforcement actions in FY 2018 than in FY 2007. In addition, the CAA and the CWA accounted for the largest portion of concluded enforcement actions with 19 percent and 28 percent of the total respectively from FYs 2007 through 2018 (Figure C-3). Overall, the number of enforcement actions concluded under the CAA declined every year from FYs 2007 (with 838 conclusions) through 2018 (with 337 conclusions), except in FYs 2010, 2011, and 2015. The number of enforcement actions concluded under the CWA decreased every year from FYs 2007 through 2018, except in FYs 2009 and 2010, declining from 994 conclusions to 483.

**Figure C-3: Civil enforcement cases concluded by the EPA by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

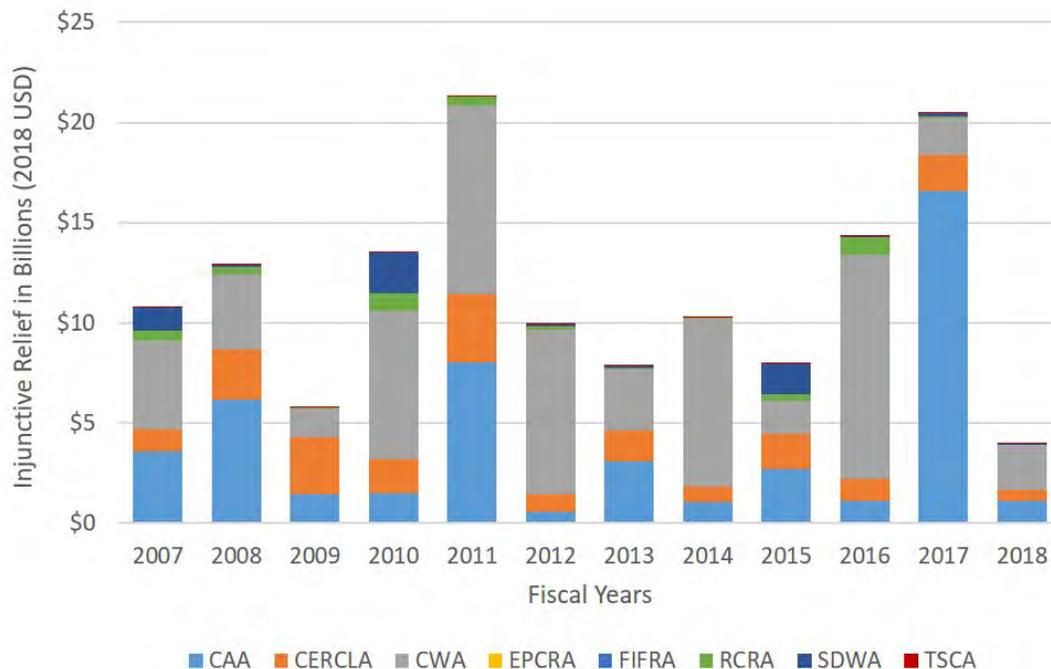
## Concluded Enforcement Actions in FY 2019

Overall, the number of concluded enforcement actions decreased by 7 percent (a decrease of 136 conclusions) in FY 2019 from FY 2018. The number of concluded enforcement actions decreased across all statutes in FY 2019, except under the CAA, which increased by 22 conclusions (7 percent). The largest decreases occurred under SDWA and the CWA, which dropped by 37 and 34 conclusions in FY 2019, respectively.

### ***The Clean Air Act and Clean Water Act Accounted for Most of the Total Value from Injunctive Relief***

Two statutes (the CAA and CWA) accounted for nearly 80 percent of the total dollar value of injunctive relief from FYs 2007 through 2018. Injunctive relief from enforcement actions concluded under the CAA and the CWA together accounted for \$110 billion of the \$139 billion total injunctive relief. CERCLA was the only other statute with significant contributions to total injunctive relief dollars over this time, accounting for 14 percent overall (\$20 billion). Large cases, such as the FY 2016 case against [BP Exploration and Production](#), which resulted in an enforcement action with \$6 billion of injunctive relief under the CWA, determined the proportion of each statute’s contribution to total injunctive relief each year (Figure C-4).

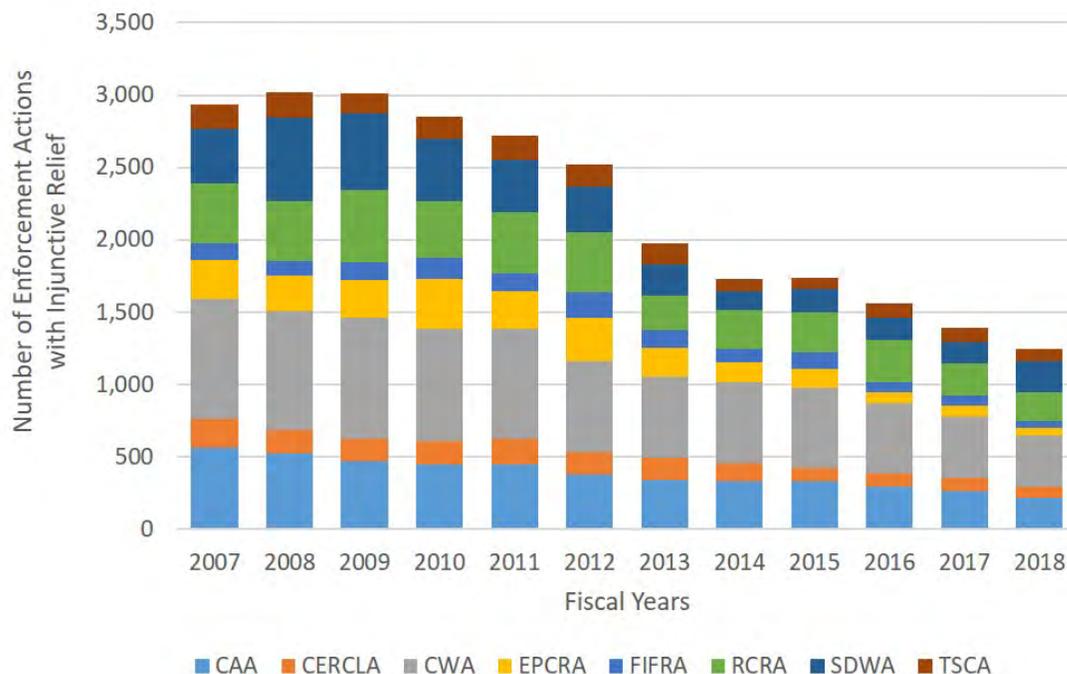
**Figure C-4: Injunctive relief in billions by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

The CAA and CWA accounted for 46 percent of all concluded enforcement actions that included injunctive relief from FYs 2007 through 2018, or 12,181 of 26,696 actions (Figure C-5). The CWA accounted for the most enforcement actions with injunctive relief in each year from FYs 2007 through 2018, ranging from 215 to 563.

**Figure C-5: Number of enforcement actions with injunctive relief by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA’s annual enforcement data. (EPA OIG image)

The number of concluded enforcement actions with injunctive relief declined from FYs 2007 through 2018 across all statutes, with a substantial decrease in FY 2013 (Figure C-5). Four statutes (RCRA, EPCRA, SDWA, and the CWA) accounted for a combined 446 of the 541 decrease in the number of enforcement actions with injunctive relief from FYs 2012 through 2013, or 82 percent of the net reduction. Of the statutes that contributed to this decrease, RCRA had the largest decrease—174 cases.

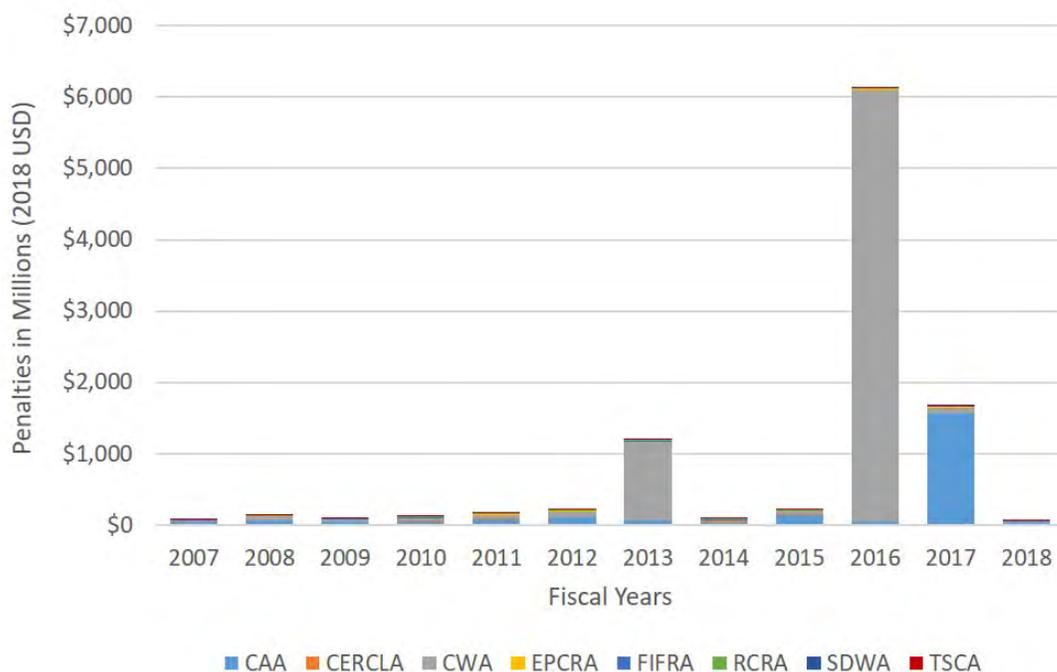
### Injunctive Relief in FY 2019

The total injunctive relief value increased in FY 2019 by a net 9 percent relative to FY 2018 (from \$3.99 billion to \$4.35 billion), while the number of enforcement actions with injunctive relief decreased from 1,233 enforcement actions in FY 2018 to 1,028 in FY 2019. The largest increase in total value occurred under the SDWA with an increase of \$1.84 billion (a 4,600-percent increase from the previous year), which was the result of a large enforcement action against the [City of New York](#). The number of SDWA actions decreased by 37 from 211 actions in FY 2018. The total value of CAA injunctive relief increased by \$460 million in FY 2019 to a total of \$1.62 billion. This increase was, in large part, due to an enforcement action against [AMEREN](#), which resulted in \$981 million in injunctive relief. The number of CAA enforcement actions with injunctive relief decreased in FY 2019 by 21 percent compared to FY 2018 (from 214 to 168). The total value of CWA injunctive relief decreased by \$1.84 billion, an 82-percent decrease from FY 2018. The number of CWA enforcement actions with injunctive relief decreased in FY 2019 by 12 percent (from 357 to 315).

### Clean Water Act and Clean Air Act Enforcement Actions Accounted for Nearly Three-Quarters of Assessed Penalties

From FYs 2007 through 2018, nearly all penalty dollars fell under either the CWA, which had 74 percent of the total, or \$7.57 billion of \$10.26 billion, or the CAA, which had 22 percent of the total, or \$2.27 billion of \$10.26 billion (Figure C-6). While the CWA accounted for the greatest penalty amount overall, CAA penalties were highest in total dollar value in ten of the 12 years. The BP Exploration and Production oil spill enforcement actions greatly increased the total CWA penalty dollars in FYs 2013 and 2016 (see Final Orders 2 and 3 for [Region 4](#) and [Region 6](#)) compared to the other years. The EPA recorded \$7 billion in penalties through eight enforcement actions that represented nearly 70 percent of total penalty dollars for the entire 12-year period of our analysis. Two of the eight actions, valued at \$538 million each, were recorded for FY 2013, which accounts for the high penalty total for that year. Similarly, CAA penalties were large in FY 2017 as a result of an enforcement action against [Volkswagen](#) through which the EPA recorded \$1.48 billion in penalties, which represented nearly 90 percent of total FY 2017 penalties.

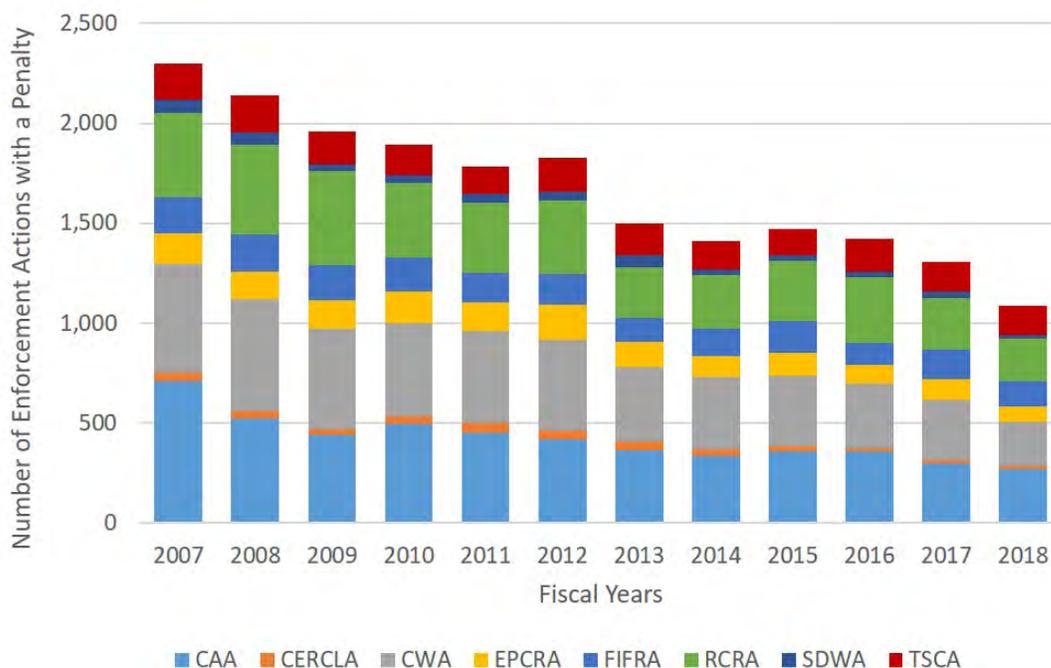
**Figure C-6: Penalties assessed in millions by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

The number of concluded enforcement actions with penalties declined when comparing FYs 2007 and 2018 across all statutes (Figure C-7). Overall, the CAA and CWA had the most enforcement actions that included penalties in each of the 12 years. The CWA had the most penalties in seven of the 12 years, while the CAA had the highest number of penalties in the other five years.

**Figure C-7: Number of penalties assessed by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

### Penalties in FY 2019

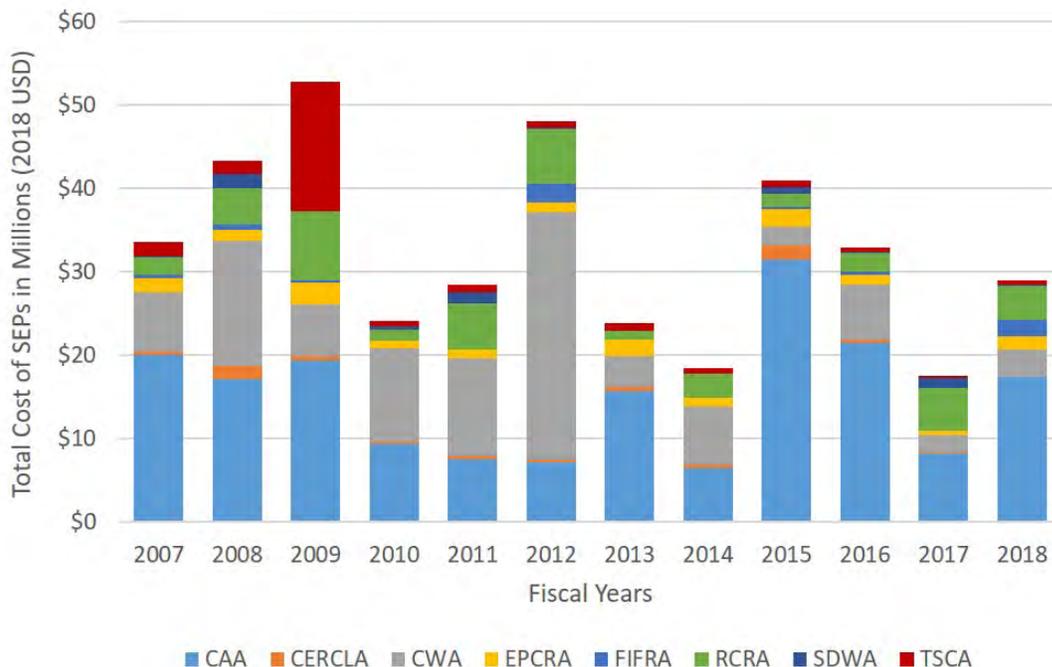
The total monetary value of EPA-assessed penalties increased by a net \$284 million in FY 2019, a 408-percent increase from FY 2018. Most of this increase derived from a \$283 million increase in CAA enforcement actions. In addition, the FY 2018 value was the lowest amount recorded in FYs 2007 through 2018. The monetary value of CWA enforcement actions also increased by \$5.42 million, in FY 2019. The penalty values from other statutes decreased by a net total of \$4.59 million, with increases in total value under CERCLA, EPCRA, and TSCA and decreases under FIFRA, RCRA, and SDWA.

### ***Clean Air Act and Clean Water Act Enforcement Actions Accounted for Nearly Three-Quarters of the Total Value of Supplemental Environmental Projects***

Nearly three-quarters of all SEP dollars were in either the CAA or the CWA from FYs 2007 through 2018 (Figure C-8). Overall, 46 percent, or \$181 million of \$393 million total, of the SEP dollars were under the CAA with an additional 27 percent, or \$106 million, from the CWA SEPs. The total dollar value of each year's SEPs was affected by the conclusions of large enforcement actions. For example, a CAA enforcement action against [Kapaa Landfill and the City and County of Honolulu](#), Hawaii, included a SEP valued at \$16.9 million, which accounted for 41 percent of the total SEP dollars in FY 2015. Two CWA enforcement actions against BP Exploration and Production concluded in [Region 4](#) and [Region 6](#) included a combined SEP total of \$21.8 million, which accounted for 47 percent of the total value in FY 2012. The TSCA enforcement action against [Memphis Gas and Water Division](#) included a SEP of \$11.8 million

dollars, which accounted for 22 percent of the total FY 2009 SEP value. This same enforcement action accounted for 47 percent of the total value of TSCA SEPs from FYs 2007 through 2018.

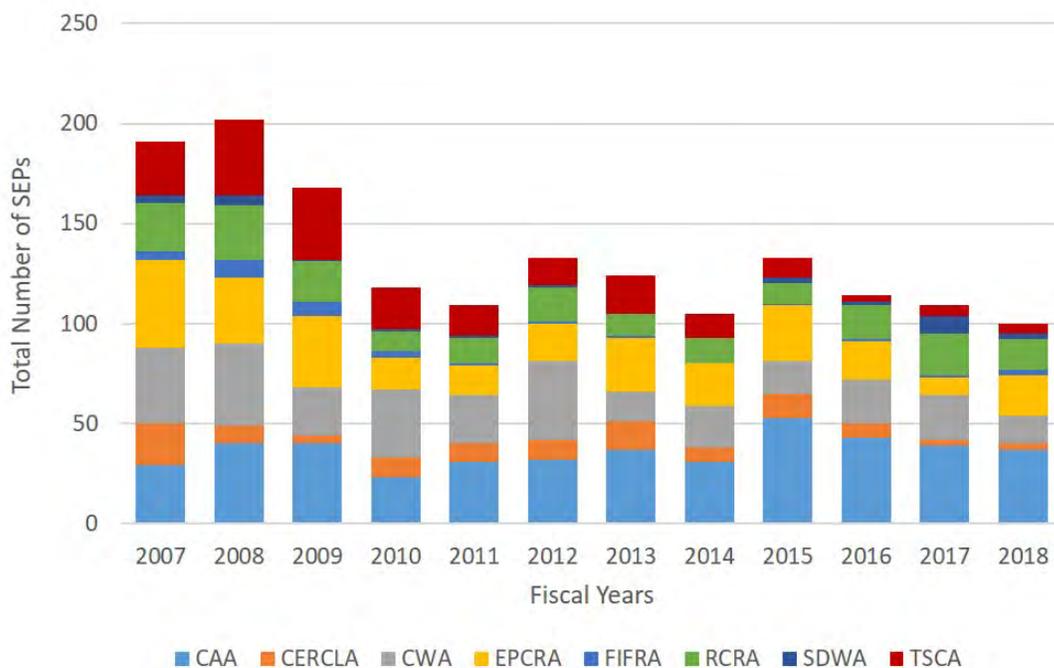
**Figure C-8: Total value of SEPs by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

The CAA, CWA, and EPCRA had the most total SEPs from FYs 2007 through 2018, with 27 percent, 19 percent, and 18 percent of the total 1,612 SEPs reported for this period, respectively (Figure C-9). Overall, the number of CAA SEPs varied year to year but decreased in FYs 2016, 2017, and 2018. In fact, CAA SEPs declined from 53 SEPs in FY 2015 to 37 in FY 2018. The number of CWA SEPs decreased or did not change in six out of 12 years from FYs 2007 through FY 2018. Overall, the number of CWA SEPs decreased from 38 in FY 2007 to just 14 in FY 2018. The number of EPCRA SEPs varied from FYs 2007 through 2018, declining in six years and increasing in five years.

**Figure C-9: Total number of SEPs by statute, FYs 2007 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

### Supplemental Environmental Projects in FY 2019

The total dollar value of SEPs decreased by a net \$3.5 million from FY 2018 to FY 2019, to \$25.6 million, and the number of SEPs decreased by 18 SEPs from 99 in FY 2018 to 81 in FY 2019. Most of this decrease in total value can be attributed to the values of FIFRA, RCRA, CWA, and EPCRA SEPs, which together decreased by \$5.5 million. The largest decreases occurred in RCRA and FIFRA SEPs, which decreased in value by \$2 million and \$1.9 million, respectively. The total value of CAA SEPs increased by \$1.9 million, an 11-percent increase from FY 2018.

## A Few Statutes Accounted for the Most Commitments Toward Environmental Benefits

In FY 2012, the EPA changed the way it tracks the three types of environmental benefits from its concluded enforcement actions in terms of commitments to:

- Reduce, treat, or eliminate pollutants (measured in pounds).
- Treat, minimize, or properly dispose of hazardous and nonhazardous contaminants (measured in pounds).
- Remove contaminants from soil or water (measured in cubic yards).

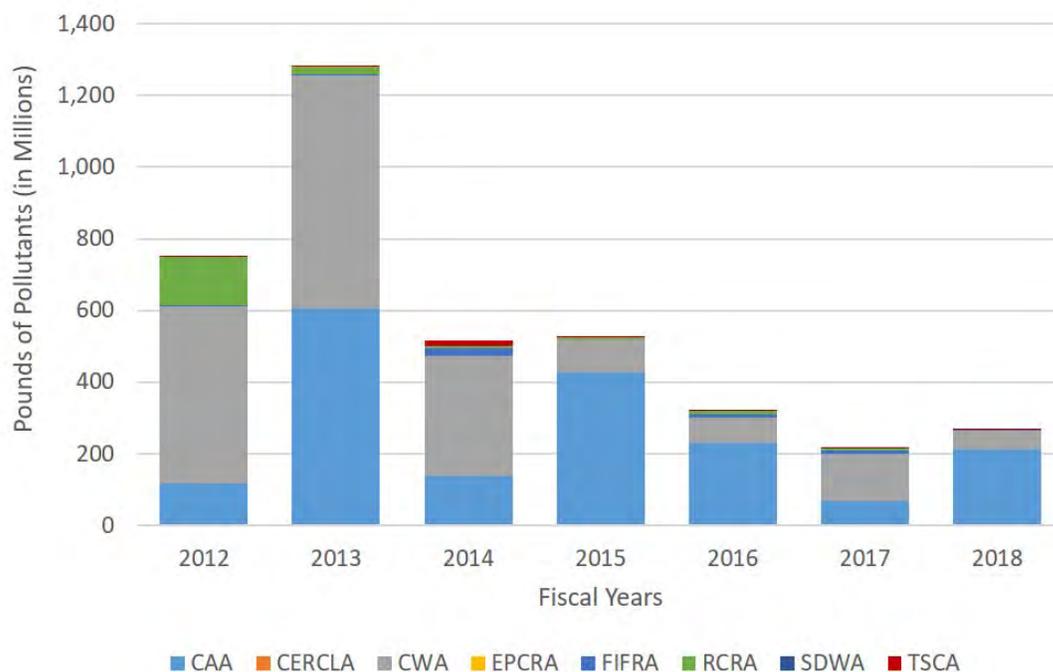
A few statutes accounted for most of the commitments toward these environmental benefits, such as commitments to reduce pollutants under the CWA and CAA or commitments to treat waste

under the RCRA. The number of commitments toward environmental benefits as part of concluded enforcement actions declined or remained steady over time under most statutes.

### **Clean Water Act and Clean Air Act Enforcement Actions Accounted for Most Pollutant Commitments and the Number of Actions Declined Over Time**

By weight, 93 percent of the total 3.9 billion pounds of commitments to reduce, treat, or eliminate pollution from FYs 2012 through 2018 were in either CAA or CWA enforcement actions (Figure C-10). RCRA actions contributed an additional 182 million pounds, or approximately 5 percent, of the total pounds of commitments toward pollutant reductions, but 53 percent of the RCRA total came in a single enforcement action against [Doe Run Resources](#) in FY 2012. The amount of CWA pounds of pollutant commitments decreased from 495 million pounds in FY 2012 to 49.9 million pounds in FY 2018, a 90-percent decrease. The total amount of CAA pounds of pollutant commitments varied year to year, ranging from 66 million to 605 million pounds.

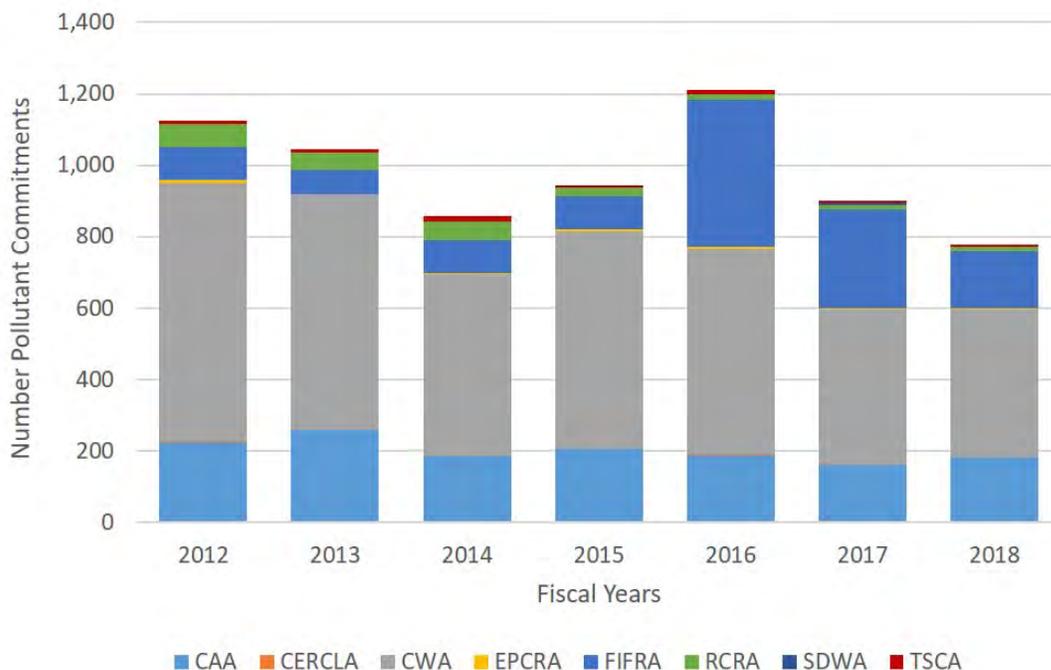
**Figure C-10: Estimated pounds of pollutants reduced, treated, or eliminated by statute, FYs 2012 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

With the exception of FY 2015, the number of CWA enforcement actions with a pollution commitment decreased each year, from 723 in FY 2012 to 415 in FY 2018 (Figure C-11). The number of enforcement actions under the CAA, EPCRA, and RCRA also decreased when comparing FY 2018 and FY 2012; TSCA enforcement actions stayed steady when comparing those two years. The number of FIFRA enforcement actions with a pollution commitment increased by 347 percent in FY 2016. The numbers declined in FYs 2017 and 2018 but were 195 and 72 percent greater than the number in FY 2012, respectively.

**Figure C-11: Enforcement actions with pollutants reduced, treated, or eliminated by statute, FYs 2012 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

While FIFRA only accounted for 1 percent of the total pounds of pollution commitments (Figure C-10), the statute made up 17 percent of the total number of enforcement actions with pollution commitments. The number of FIFRA pollutant commitments comprised the third largest total, following CWA and CAA, which together accounted for 78 percent of the total enforcement actions with pollution commitments (Figure C-11). The average FIFRA case size was 44,506 pounds, compared to the CWA and CAA averages of 464,104 pounds and 1.3 million pounds, respectively.

### Pollutant Commitments in FY 2019

The total pounds from pollution commitments increased by 19 percent, or 56 million pounds, in FY 2019 compared to FY 2018. CWA enforcement actions, which included 62 million pounds, were responsible for this increase, and mostly arose from a large enforcement action against [MR Developers LLC-Montecielo](#). FIFRA enforcement actions included an additional 1.6 million pounds. The amounts reported under the other statutes decreased or remained steady, with CAA enforcement actions accounting for the largest decrease of 6 million pounds. The total number of enforcement actions with a pollutant commitment increased under the CAA, CERCLA, CWA, EPCRA, and FIFRA and decreased or remained steady under the other statutes.

### **Resource Conservation and Recovery Act Enforcement Actions Accounted for Most Waste Commitments and the Number of Actions Remained Steady Over Time**

RCRA enforcement actions accounted for 99 percent of the total 68.5 billion pounds of the commitments for waste to be treated, minimized, or properly disposed of from FYs 2012 through 2018 (Figure C-12). Large cases, such as the enforcement actions in [Region 4](#) and [Region 6](#) against Mosaic Fertilizer in FY 2016, affected the total pounds of waste commitments from RCRA enforcement reported each year. The Mosaic Fertilizer enforcement action resulted in 61.7 billion pounds of waste commitments and accounted for 90 percent of total pounds of waste commitments from FYs 2012 through 2018.

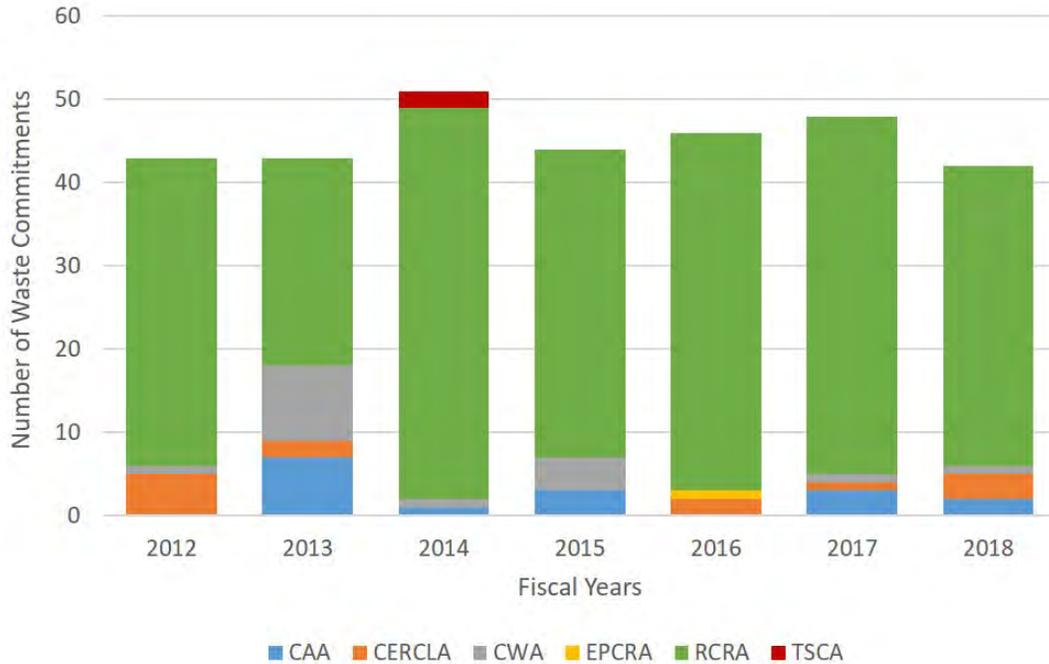
**Figure C-12: Estimated pounds of hazardous and nonhazardous waste treated, minimized, or properly disposed of by statute, FYs 2012 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

The number of enforcement actions with waste commitments remained fairly constant from FYs 2012 through 2018 (Figure C-13). RCRA actions made up 85 percent of the total 317 enforcement actions. There were proportionally more CAA, CERCLA, and CWA actions—4 to 5 percent of the total actions each—than the total pounds by statute suggests (Figure C-12).

**Figure C-13: Enforcement actions with hazardous and nonhazardous waste treated, minimized, or properly disposed by statute, FYs 2012 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

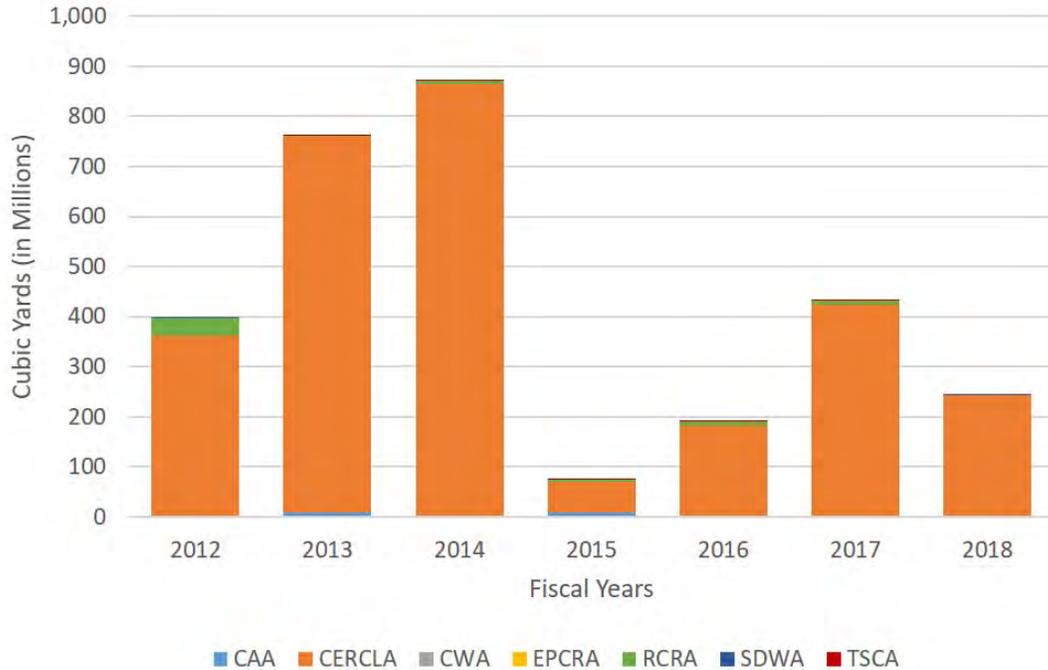
### Waste Commitments in FY 2019

The total pounds recorded from waste commitments dropped in FY 2019 by 99 percent to 5 million pounds, compared to the 542 million pounds reported in FY 2018. Most of that decrease in commitments was attributed to RCRA. In addition, the number of annual RCRA waste commitments decreased by 12, a 33-percent decrease from the previous year.

### ***Comprehensive Environmental Response, Compensation, and Liability Act Enforcement Actions Accounted for Most Cleanup Commitments and Decreased Most Years***

CERCLA enforcement actions accounted for 97 percent of the total 2.97 billion cubic yards of commitments to clean up contaminated soil or water from FYs 2012 through 2018 (Figure C-14). The annual total cubic yards resulting from CERCLA enforcement actions varied based on when large enforcement actions concluded. For example, the enforcement action against [Milan Army Ammunition Plant](#) resulted in a commitment to clean up 798 million cubic yards of groundwater and contributed 92 percent of the total volume of cleanup commitments from CERCLA that year.

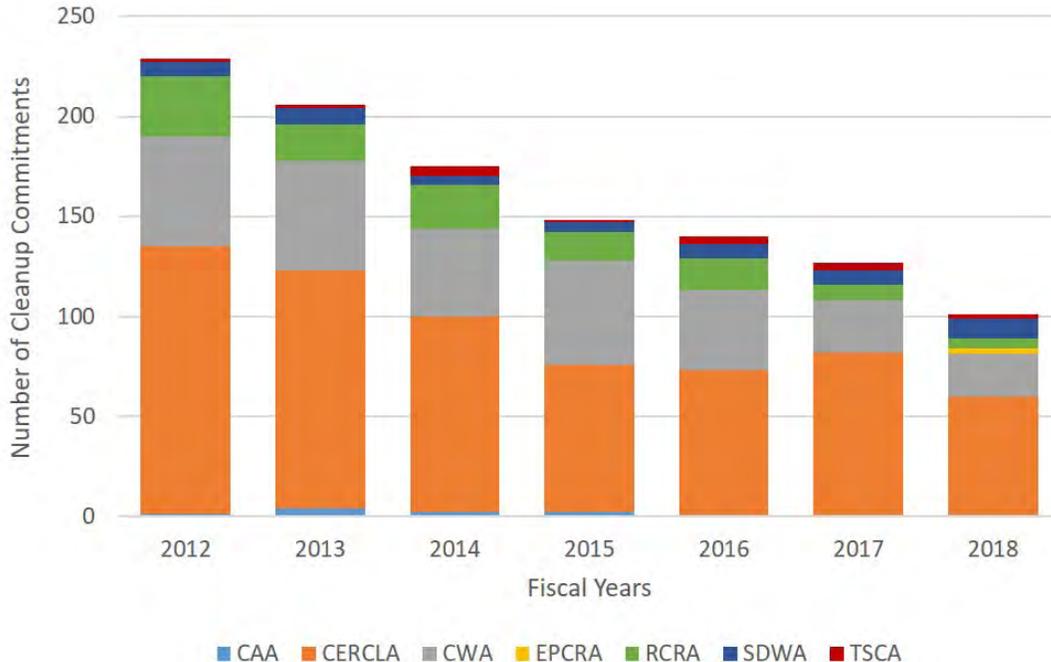
**Figure C-14: Estimated cubic yards of contaminated soil and water to be cleaned up by statute, FYs 2012 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

CERCLA actions, however, made up only 57 percent of the 1,126 total number of enforcement actions with such cleanup commitments from FYs 2012 through 2018 (Figure C-15). The number of CERCLA actions decreased each year from 134 in FY 2012 to 60 in FY 2018, except for a slight increase in FY 2017. There were proportionally more CWA enforcement actions than the volumetric data suggests, but they were generally smaller commitments than those under CERCLA. CWA enforcement actions comprised less than 1 percent of the volumetric commitments but made up 26 percent, or 293, of the 1,126 total enforcement actions.

**Figure C-15: Enforcement actions with contaminated soil and water to be cleaned up by statute, FYs 2012 through 2018**



Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG image)

### Cleanup Commitments in FY 2019

From FYs 2018 to 2019, the number of enforcement actions with cleanup commitments decreased by 22 percent, or 22 actions, and the total volume of cleanup commitments decreased by 95 percent, or 232 million cubic yards. The number of CERCLA enforcement actions with cleanup commitments decreased by ten from 60 actions in FY 2018 to 50 in FY 2019. In addition, the total volume reported for cleanup commitments decreased by 232 million cubic yards, which accounted for over 99 percent of the total decrease in cleanup commitments in FY 2019.

### Statute-Specific Summaries of Enforcement Trends Over Time

We prepared statute-specific summaries for the following eight environmental statutes: CAA, CERCLA, CWA, EPCRA, FIFRA, RCRA, SDWA, and TSCA.

# Clean Air Act Enforcement Results (FYs 2007–2018)



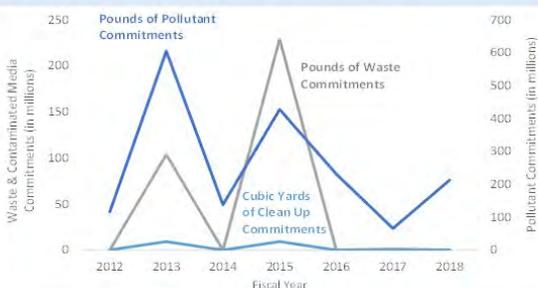
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- CAA compliance monitoring activities accounted for 20 percent of the total activities (41,104 of 203,389) conducted from FYs 2007 through 2018 but decreased from 3,658 activities in FY 2007 to 2,299 activities in FY 2018 (-37 percent).
- CAA case initiations accounted for 19 percent of the total initiations (6,535 of 33,783) but decreased 63 percent (from 887 to 329 initiations) from FYs 2007 through 2018.
- CAA-concluded enforcement actions accounted for 19 percent of the total concluded actions (6,399 of 33,783) but decreased 60 percent (from 838 to 337 actions) from FYs 2007 through 2018.

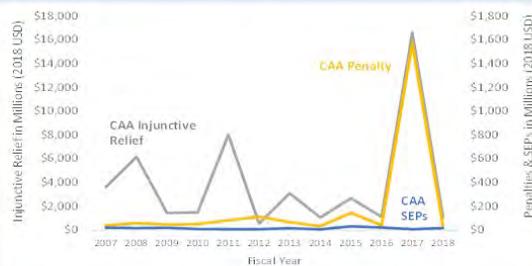
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- CAA-concluded actions with pollutant commitments accounted for 20 percent of the total actions with such commitments across all statutes (1,406 of 6,861) from FYs 2012 through 2018.
- CAA concluded actions accounted for 46 percent of the total pounds of pollutant commitments (1.8 billion of 3.9 billion pounds), less than 1 percent (334 million of 68.5 billion) of the total pounds of waste commitments, and less than 1 percent (18.6 million of 3.0 billion) of the total cubic yards of cleanup commitments from FYs 2012 through 2018 across all statutes.

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- CAA concluded enforcement actions contributed 22 percent of the total federally assessed penalty dollars (\$2.27 billion of \$10.3 billion) from FYs 2007 through 2018.
- CAA § 112(r)(7) and CAA § 173 cases accounted for 66 percent (\$1.5 billion) of the total CAA penalties from FYs 2007 through 2018.
- A large CAA-concluded enforcement case in FY 2017 against Volkswagen included \$1.48 billion in penalties, which was 90 percent of the total penalties for that year.

### Injunctive relief

- CAA-concluded cases accounted for 17 percent of total cases with injunctive relief (4,594 of 26,696) and contributed 34 percent of total injunctive relief (\$47 billion of \$139 billion) from FYs 2007 through FY 2018.
- CAA § 112(r)(7) and CAA § 173 cases accounted for 55 percent (\$26 billion of \$47 billion) of the total CAA injunctive relief from FYs 2007 through 2018.
- A large CAA-concluded enforcement case in FY 2017 against Volkswagen included \$16.3 billion in injunctive relief, which was 80 percent of the total injunctive relief for that year.

### Supplemental environmental projects

- CAA SEPs represented 27 percent of all SEPs (435 of 1,612 cases with SEPs) and 46 percent of all SEP dollars (\$181 million of \$393 million) from FYs 2007 through 2018.
- CAA § 112(r)(7) and CAA § 110 cases accounted for 58 percent of the total CAA SEPs.
- A large CAA-concluded enforcement case in FY 2015 (Kapaa Landfill and the City and County of Honolulu) contributed 55 percent (\$16.9 million) of the CAA SEP dollars that year.

## FY 2019 ENFORCEMENT RESULTS

- CAA compliance monitoring activities decreased by 14 percent (-329 activities) and concluded actions increased by 7 percent (+22 actions) from FY 2018.
- CAA penalties, injunctive relief, and SEPs increased by \$283 million (+855 percent), \$450 million (+22 percent), and \$1.9 million (+11 percent) from FY 2018, respectively.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Comprehensive Environmental Response, Compensation, and Liability Act Enforcement Results (FYs 2007–2018)



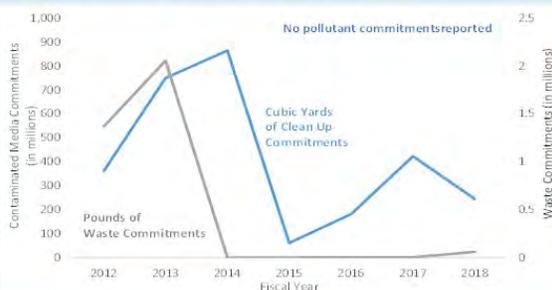
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- The EPA does not record compliance monitoring activities under its CERCLA authorities.
- CERCLA case initiations accounted for 8 percent of all case initiations (2,785 of 33,783) from FYs 2007 through 2018 but decreased 69 percent since FY 2009 (from 466 to 143).
- CERCLA-concluded actions accounted for 9 percent of the total actions (3,005 of 33,783) from FYs 2007 through 2018 but decreased 72 percent since FY 2009 (from 493 to 139 actions).

## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)

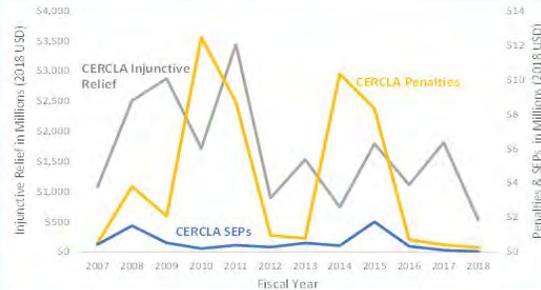


Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- CERCLA enforcement actions accounted for 57 percent of the total number of EPA actions with cleanup commitments (640 of 1,126) and contributed 97 percent of the total cubic yards of clean up commitments (2.9 billion of nearly 3 billion cubic yards) from FYs 2012 through 2018.
- CERCLA enforcement actions contributed less than 1 percent towards the total pounds of pollutant commitments and the total pounds of waste commitments across all statutes.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

## Penalties

- CERCLA-concluded enforcement actions contributed less than 1 percent of the total penalty dollars (\$49 million of \$10.3 billion) from FYs 2007 through 2018.
- Large concluded CERCLA cases occurred in FY 2010 (Chemtura Corp, \$9.3 million) and FY 2014 (Titan Tire Corp and Dico, Inc., \$9 million).

## Injunctive relief

- CERCLA-concluded enforcement actions accounted for 6 percent of the total actions with injunctive relief (1,637 of 26,696) and contributed 14 percent of total injunctive relief (\$20 billion of \$139 billion) from FYs 2007 through 2018.
- Large concluded CERCLA cases occurred in FYs 2009 (Tennessee Valley Authority, \$1.14 billion) and 2011 (Lyondell Chemical Company, \$1.13 billion).

## Supplemental environmental projects

- CERCLA-concluded enforcement actions accounted for 7 percent of the total SEPs (109 of 1,612) and contributed 1.5 percent of the total SEP dollars (\$6 million of \$393 million) from FYs 2007 through 2018.
- Large concluded CERCLA cases occurred in FYs 2008 (U.S. Department of Energy Hanford Facility, \$974,000) and 2015 (Pechiney Plastics Packaging, Inc., \$1.2 million).

## FY 2019 ENFORCEMENT RESULTS

- CERCLA cleanup commitments decreased from 60 actions in FY 2018 to 50 actions in FY 2019.
- CERCLA cleanup commitments decreased by 232 million cubic yards from FY 2018, accounting for over 99 percent of the total decrease in cleanup commitments across all statutes.

# Clean Water Act Enforcement Results (FYs 2007–2018)



## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- CWA compliance monitoring activities accounted for 19 percent of total monitoring activities (37,642 of 203,389) but decreased 36 percent (from 3,469 to 2,213) from FYs 2007 through 2018.
- CWA case initiations accounted for 28 percent of the EPA's total case initiations (9,555 of 33,783) but decreased 52 percent (from 1,031 to 492 initiations) from FYs 2007 through 2018.
- CWA-concluded enforcement actions represented 28 percent of the total enforcement actions (9,509 of 33,783) but decreased 51 percent (from 994 to 483 actions) from FYs 2007 through 2018.

## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



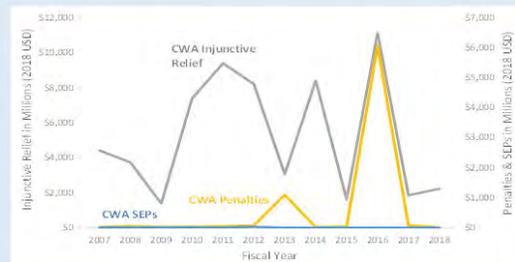
Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- CWA-concluded actions with pollutant commitments accounted for 57 percent of the EPA's total actions with such commitments (3,928 of 6,861) and 46 percent of the total commitments in pounds (1.8 billion of 3.9 billion pounds) from FYs 2012 through 2018.
- Pollutant commitments decreased from 495 million pounds in FY 2012 to 50 million pounds in FY 2018 (–90 percent)
- Ninety-seven percent of CWA actions with pollutant commitments fell under CWA § 301/402 or CWA § 301.

## FY 2019 ENFORCEMENT RESULTS

- CWA compliance monitoring activities increased by 9 percent (+194 activities), concluded enforcement actions decreased by 7 percent, from 487 in FY 2018 to 453 in FY 2019.
- CWA penalties, injunctive relief, and SEPs increased by \$5.4 million (+49 percent), decreased by \$1.84 billion (–82 percent) and decreased by \$0.7 million (–21 percent) from FY 2018, respectively.

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

## Penalties

- CWA penalties represented 74 percent of the total federally assessed penalty dollars (\$7.6 billion of \$10.3 billion) from FYs 2007 through 2018.
- CWA § 301/402 and CWA § 311J cases accounted for 63 percent of total concluded enforcement actions with penalties from FYs 2007 through 2018.
- Number of CWA § 311B cases with penalties declined 86 percent from FYs 2007 through 2018 (156 to 16 cases).
- Two large CWA-concluded enforcement cases in FY 2016 (BP Exploration & Production and BP Exploration MOEX) contributed over \$7 billion in penalties, 93 percent of all CWA penalty dollars from FYs through 2018.

## Injunctive relief

- CWA-concluded enforcement actions accounted for 28 percent of concluded cases with injunctive relief (7,587 of 26,696) and contributed 45 percent of total injunctive relief dollars (\$63 billion of \$139 billion) from FYs 2007 through 2018.
- CWA § 301/402 and CWA § 311J enforcement actions accounted for 64 percent of CWA-concluded enforcement cases with injunctive relief (5,485 of 8,511 total CWA cases).
- CWA § 311B-concluded cases with injunctive relief decreased by 93 percent, when comparing the peak in FY 2008 (143 cases) to FY 2018 (ten cases).
- Three CWA cases with large injunctive relief values occurred in FY 2016 (BP Exploration & Production Inc., \$6.09 billion), FY 2012 (Metropolitan St. Louis Sewer District, \$5.14 billion), and FY 2011 (Honolulu, City and County, \$4.14 billion).

## Supplemental environmental projects

- CWA SEPs represented 19 percent of the total SEPs (310 of 1,612) and contributed 27 percent of the total SEP dollars (\$106 million of \$393 million) but decreased 86 percent from FYs 2012 to 2013.
- CWA § 301/402 and CWA § 301 cases accounted for 72 percent (262 out of 362) of total CWA-concluded cases that included SEPs.
- A large CWA concluded enforcement case in FY 2012 (BP Exploration and Production) contributed \$10.9 million in SEPs.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Emergency Planning & Community Right-to-Know Act Enforcement Results (FYs 2007–2018)



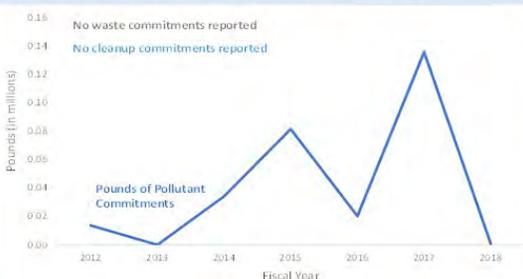
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- EPCRA compliance monitoring activities accounted for 4 percent of the EPA's total monitoring activities (9,075 of 203,389) but decreased 46 percent (from 914 to 498) from FYs 2007 through 2018.
- EPCRA case initiations accounted for 5 percent of the total cases initiated (1,587 of 33,783) from FYs 2007 through 2018 but decreased by 60 percent from FYs 2012 through 2018 (from 185 to 74 initiations).
- EPCRA-concluded enforcement actions accounted for 5 percent of the total concluded actions (1,612 of 33,783) but decreased 56 percent (from 166 to 73 actions) from FYs 2007 through 2018.

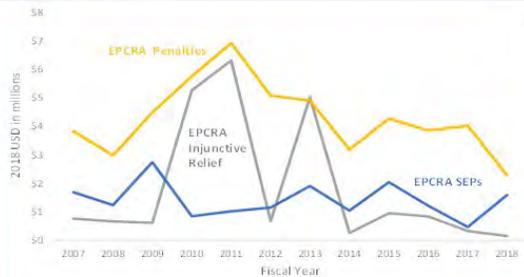
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- EPCRA-concluded enforcement actions accounted for less than 1 percent of total actions with pollutant commitments (29 of 6861) and less than 1 percent of the total pounds of pollutant commitments (286,800 pounds of 3.9 billion pounds) from FYs 2012 through 2018.
- A large EPCRA concluded action in FY 2017 (Lamart Corporation, 130,000 pounds) contributed 45 percent of the total EPCRA pollutant commitments from FYs 2012 through 2018.

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- EPCRA-concluded enforcement actions contributed less than 1 percent of the total federally-assessed penalties (\$51 million of \$10.3 billion) from FYs 2007 through 2018.
- A large EPCRA-concluded case occurred in FY 2011 (Unisea Incorporated, \$1.6 million), contributed 23 percent to the total EPCRA penalties that year.

### Injunctive relief

- EPCRA-concluded enforcement actions accounted for 9 percent of all concluded cases with injunctive relief (2,368 of 26,696) and contributed less than 1 percent of the total injunctive relief dollars (\$22 million of \$139 billion) from FYs 2007 through 2018.
- Large EPCRA-concluded cases occurred in FY 2010 (McWane, Inc., \$4.2 million), FY 2011 (FFCA with U.S. Department of Interior, \$3.1 million; Unisea Incorporated, \$1.6 million), and FY 2013 (New Cingular, \$3.3 million).

### Supplemental environmental projects

- EPCRA SEPs represented 18 percent of the total concluded cases with SEPs (287 of 1,612 total cases with SEPs) and contributed 4 percent of the total SEP dollars (\$17 million of \$393 million) from FYs 2007 through 2018.
- Three large EPCRA-concluded cases occurred in FY 2009 (Linde Inc., \$485,362; BP Products North America, Texas City, TX, \$425,320; and Simoniz USA, \$318,379), contributing 41 percent to the total EPCRA SEP dollars that year.

### FY 2019 ENFORCEMENT RESULTS

- EPCRA compliance monitoring activities decreased by 15 percent (–74 activities) and concluded actions decreased by 7 percent (–5 actions) from FY 2018.
- EPCRA penalties increased by \$95,000 (+4 percent), injunctive relief did not significantly change, and EPCRA SEPs decreased \$856,000 (–54 percent) from FY 2018.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Federal Insecticide, Fungicide, and Rodenticide Act Enforcement Results (FYs 2007–2018)



## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- FIFRA compliance monitoring activities accounted for 2 percent of the EPA's total monitoring activities conducted (4,535 of 203,389) and remained relatively steady in number (except for an increase in FY 2012) from FYs 2007 through 2018.
- FIFRA case initiations accounted for 7 percent of the total case initiations (2,407 of 33,783) from FYs 2007 through 2018 but decreased 40 percent from FYs 2012 through 2018 (from 248 to 150 initiations).
- FIFRA concluded enforcement actions accounted for 7 percent of the total actions across all statutes (2,433 of 33,783) and have decreased 40 percent (from 256 to 154 actions) from FYs 2007 through 2018.

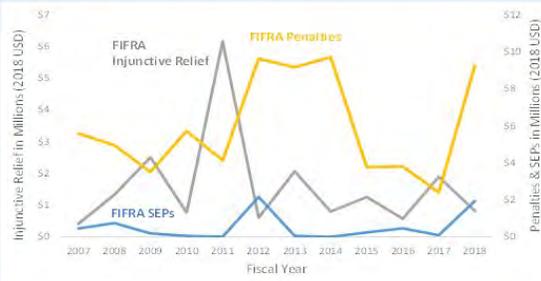
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- FIFRA-concluded enforcement actions with pollutant commitments accounted for 17 percent of the total actions with such commitments (1,194 of 6,861) and contributed 1 percent of the total pounds of pollutant commitments (5 million of 3.9 billion pounds) from FYs 2012 through 2018.

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- FIFRA-concluded enforcement actions represented less than 1 percent of the federally assessed total penalty dollars (\$72 million of \$10.3 billion) from FYs 2007 through 2018.
- Large concluded FIFRA cases occurred in FYs 2010 (Monsanto, \$2.9 million), 2012 (Scotts Miracle Gro Company, \$6.6 million), 2013 (EMD Millipore Corp, \$2.9 million), 2014 (El DuPont de Nemours and Company, nearly \$2.0 million; Harrell's LLC, \$1.8 million), and 2018 (Medline Industries, \$4.9 million).

### Injunctive relief

- FIFRA-concluded enforcement actions accounted for nearly 5 percent of the total concluded cases with injunctive relief (1,276 of 26,696) and contributed less than 1 percent to the total injunctive relief dollars (\$19 million of \$139 billion) from FYs 2007 through 2018.
- Large FIFRA concluded actions occurred in FY 2011 (LESCO, Inc., \$3.3 million) and in FY 2009 (A-Dec Inc., \$1.4 million).

### Supplemental environmental projects

- FIFRA-concluded enforcement actions accounted for nearly 2 percent of the total SEPs (32 of 1,612) and contributed 1.5 percent to the total SEP dollars (\$6 million of \$393 million) from FYs 2007 through 2018.
- Large concluded cases occurred in FYs 2012 (Scotts Miracle Gro Company, \$2.2 million) and 2018 (Amazon Services LLC, \$1.5 million), contributing 62 percent to the total FIFRA SEP dollars from FYs 2007 through 2018.

## FY 2019 ENFORCEMENT RESULTS

- The EPA conducted 15 fewer FIFRA compliance monitoring activities, down 5 percent from 310 activities in FY 2018.
- There were no FIFRA SEPs in FY 2019 and FIFRA injunctive relief decreased 30 percent (-\$200,000) from FY 2018.

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Resource Conservation and Recovery Act Enforcement Results (FYs 2007–2018)



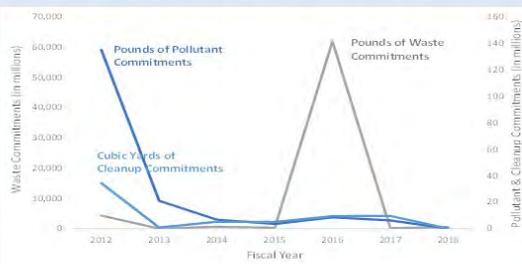
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- RCRA compliance monitoring activities accounted for 18 percent of the EPA’s total monitoring activities conducted (35,790 of 203,389) but decreased 53 percent (from 3,994 to 1,883) from FYs 2007 through 2018.
- RCRA-initiated cases accounted for 13 percent of the total initiated cases (4,437 of 33,783) from FYs 2007 through 2018 but decreased 52 percent from FYs 2009 through 2018 (from 515 to 247 initiations).
- RCRA-concluded enforcement actions accounted for 1 percent of the total actions (4,443 of 33,783) from FYs 2007 through 2018 but decreased 50 percent from FYs 2009 through 2018 (from 500 to 248 actions).

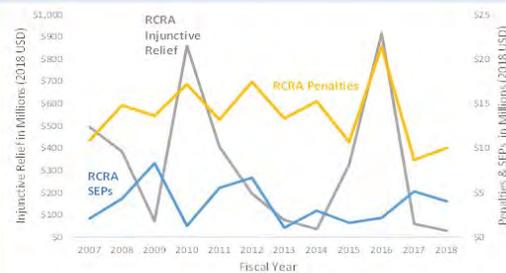
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- RCRA-concluded enforcement actions with waste commitments accounted for 85 percent of the total actions with such commitments (268 of 317) and 99 percent of the total pounds of waste commitments (68 billion of 68.4 billion) from FYs 2012 through 2018.
- A large case in FY 2016 against Mosaic Fertilizer accounted for 90 percent of total pounds of waste commitments across all statutes from FYs 2012 through 2018.

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- RCRA-concluded enforcement actions represented nearly 2 percent of the total federally assessed penalty dollars (\$165 million of \$10.3 billion) from FYs 2007 through 2018.
- Three large concluded RCRA cases occurred in FY 2016 (Mosaic Phosphates, Inc., \$2.5 million; IMC Phosphates Co., \$2.8 million; Whole Foods Market Rocky Mountain/Southwest LP, \$2.3 million) and contributed 40 percent of the total RCRA penalties assessed that year.

### Injunctive relief

- RCRA-concluded enforcement actions accounted for 15 percent of total concluded cases with injunctive relief (4,081 of 26,696) and contributed nearly 3 percent of the total injunctive relief dollars (\$3.8 billion of \$139 billion) from FYs 2007 through 2018.
- Large RCRA cases occurred in FYs 2010 (Exxon Mobil Oil Corporation, \$402 million) and 2016 (Mosaic Fertilizer, \$664 million), contributing over 25 percent of the total RCRA injunctive relief from FYs 2007 through 2018.

### Supplemental environmental projects

- RCRA-concluded enforcement actions accounted for 12 percent of total SEPs (198 of 1,612) and contributed 11 percent to the total SEP dollars (\$45 million of \$393 million) from FYs 2007 through 2018.
- Large RCRA cases occurred in FYs 2009 (Shintech, Inc., \$5.5 million), 2011 (Chevron Puerto Rico LLC, \$3.9 million), 2012 (Nassau County, NY, \$1.8 million, and Clean Harbors of Braintree, \$1.2 million), and 2017 (Whole Foods Market Group Inc., \$2.8 million), contributing 34 percent of the total RCRA SEP dollars from FYs 2007 through 2018.

## FY 2019 ENFORCEMENT RESULTS

- RCRA compliance monitoring activities remained steady with 1,888 activities, up slightly from 1,884 in FY 2018.
- RCRA-concluded enforcement actions with waste commitments decreased by 32 percent (–12) and the pounds of waste commitments decreased by 99 percent (–537 million pounds) from FY 2018.

Source: OIG analysis of EPA’s annual enforcement data. (EPA OIG image)

# Safe Drinking Water Act Enforcement Results (FYs 2007–2018)



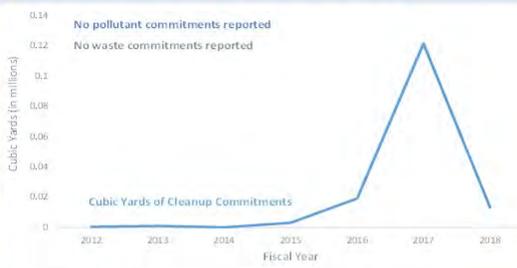
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- SDWA compliance monitoring activities accounted for 30 percent of the EPA's total monitoring activities conducted (60,470 of 203,389) between FYs 2007 and 2018. After a large increase between FYs 2007 through 2009, these activities decreased 65 percent from FYs 2010 through 2018.
- SDWA case initiations accounted for 13 percent of the total case initiations (4,370 of 33,783) from FYs 2007 through 2018 but decreased 62 percent after FY 2008 (from 609 to 229 initiations).
- SDWA-concluded enforcement actions accounted for 13 percent of the total concluded actions (4,295 of 33,783) from FYs 2007 through 2018 but decreased 62 percent from FYs 2008 through 2018 (from 608 to 230 actions).

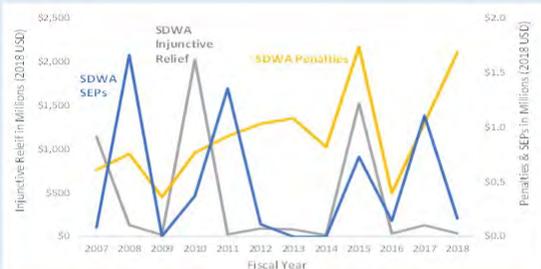
## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- SDWA-concluded enforcement actions with cleanup commitments accounted for 4 percent of the EPA's total actions with such commitments (48 of 1,126) and less than 1 percent of the total cubic yards from cleanup commitments (159,000 of nearly 3 billion cubic yards) from FYs 2012 through 2018.
- In a large SDWA concluded action in FY 2017, the county of Hawaii communities of Pahala and Naahelu were ordered to clean up 118,000 cubic yards of ground water contaminated by sanitary sewage. This case accounted for 74 percent of the total SDWA cleanup commitments from FYs 2012 through 2018.

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

## Penalties

- SDWA-concluded enforcement actions represent less than 1 percent of the total federally assessed penalty dollars (\$11 million of \$10.3 billion) from FYs 2007 through 2018.
- Large concluded SDWA cases occurred in FY 2015 (County of Westchester [Water District No. 1], \$1.2 million), in FY 2014 (Newfield Production Company, \$634,800) and FY 2018 (Estell/SD, Lot 2, \$588,700).

## Injunctive relief

- SDWA-concluded enforcement actions accounted for 13 percent of all concluded cases with injunctive relief (3,589 of 26,696) and contributed 4 percent of the total injunctive relief dollars (\$5.3 billion of \$139 billion) from FYs 2007 through 2018.
- SDWA-concluded cases with large injunctive relief values occurred in FYs 2010 (New York City Department of Environmental Protection, \$1.84 billion) and 2015 (City of Croton, NY, \$1.48 billion).

## Supplemental environmental projects

- SDWA-concluded enforcement actions accounted for nearly 2 percent of all SEPs (30 of 1,612) and contributed 1.5 percent to the total value of SEP dollars (\$6 million of \$393 million) from FYs 2007 through 2018.
- SDWA-concluded cases with large SEP values occurred in FYs 2008 (Town of Newburgh, \$1.1 million), 2011 (Department of Interior, \$1.4 million), 2015 (County of Westchester [Water District No. 1], \$729,200), and 2017 (New York State Office of Parks, \$1 million), cumulatively representing 70 percent of the total SDWA SEP dollars.

## FY 2019 ENFORCEMENT RESULTS

- SDWA compliance monitoring activities decreased by 5 percent (–117 activities) and concluded cases decreased by 16 percent (–37 conclusions) from FY 2018.
- SDWA injunctive relief increased \$1.84 billion in FY 2019, but one large case accounted for 98 percent of the year's SDWA injunctive relief (City of New York et al, \$1.85 billion).

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

# Toxic Substances Control Act Enforcement Results (FYs 2007–2018)



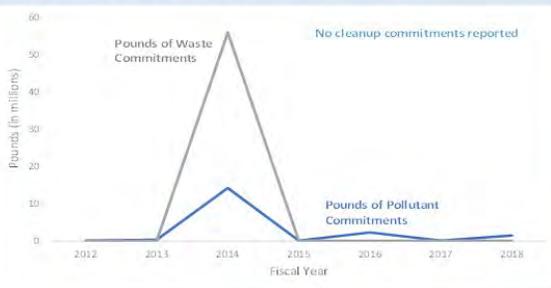
## COMPLIANCE MONITORING & ENFORCEMENT ACTIVITIES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- TSCA compliance monitoring activities accounted for 7 percent of the total monitoring activities conducted (14,773 of 203,389) but decreased by 38 percent (from 1,590 to 993) from FYs 2007 through 2018.
- TSCA case initiations accounted for 6 percent of the total case initiations (2,090 of 33,783) but decreased by 24 percent (from 218 to 165 initiations) from FYs 2007 through 2018.
- TSCA-concluded enforcement actions accounted for 6 percent of the total concluded actions (2,069 of 33,783) and decreased 24 percent (from 205 to 155 actions) from FYs 2007 through 2018.

## ENVIRONMENTAL BENEFITS COMMITMENTS (FYs 2012–2018)

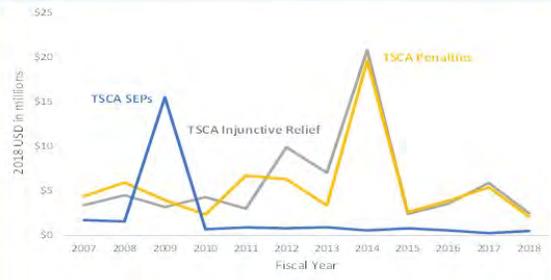


Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

- TSCA-concluded actions with waste commitments accounted for less than 1 percent of total actions with such commitments (2 of 317) and contributed less than 1 percent of total pounds of waste commitments (56 million of 68.5 billion pounds) from FYs 2012 through 2018.
- The largest TSCA case concluded in FY 2014 and included nearly all the TSCA included waste commitments for that year and for FYs 2012 through 2018 (Titanium Metals Corporation, 56 million pounds).

Source: OIG analysis of EPA's annual enforcement data. (EPA OIG image)

## CONCLUDED CASES WITH MONETARY VALUES



Source: OIG analysis of EPA annual enforcement results. (EPA OIG image)

### Penalties

- TSCA-concluded enforcement actions represented less than 1 percent of the total federally assessed penalty dollars (\$67 million of \$10.3 billion) from FYs 2007 through 2018.
- Two large concluded TSCA cases occurred in FY 2014 (Elementis Chromium, LP, \$2.7 million; Titanium Metals Corporation, \$14.8 million), contributing 89 percent of the total TSCA penalties for that year.

### Injunctive relief

- TSCA-concluded enforcement actions accounted for 6 percent of all concluded cases that included injunctive relief (1,564 of 26,696) and contributed less than 1 percent of the total injunctive relief dollars (\$70 million of \$13 billion) from FYs 2007 through 2018.
- Two TSCA-concluded cases with large injunctive relief values occurred in FY 2014 (Titanium Metals Corporation \$7.4 million; Prince Georges County School District, \$4.99 million).

### Supplemental Environmental Projects

- TSCA-concluded enforcement actions accounted for 13 percent of all SEPs (205 of 1,612) and contributed 6 percent to the total value of SEP dollars (\$25 million of \$393 million) from FYs 2007 through 2018.
- A large concluded case in FY 2009 (Memphis Gas and Water Division, \$11.8 million) accounted for 47 percent of the total value of TSCA SEP dollars for FYs 2007 through 2018.

## FY 2019 ENFORCEMENT RESULTS

- TSCA compliance monitoring activities decreased by 7 percent (-69), from 995 in FY 2018 to 926 in FY 2019 and conclusions decreased by 16 percent (-37 conclusions).
- The EPA recorded one fewer TSCA SEP in FY 2019 and the total value of TSCA SEPs decreased by about \$160,000 from FY 2018 (-32 percent).

## **Changes in Enforcement Measures in FYs 2019 and 2020**

Compared to FY 2019, 11 of the 15 enforcement measures declined in FY 2020 (Table D-1), although two of those declining measures were relatively stable (less than a 3 percent decline). The coronavirus pandemic likely impacted the long-term downward trend of EPA enforcement activities in FY 2020. Four enforcement measures increased in FY 2020 from FY 2019. The three environmental benefit measures increased in FY 2020 because of the large commitments resulting from enforcement actions against [Detroit Edison](#) (pollution commitments), [Simplot Phosphates](#) (waste commitments), and [Foster Wheeler Energy Corporation](#) (cleanup commitments). Two of the four measures that increased in FY 2019 relative to FY 2018—total injunctive relief and penalty dollars—decreased in FY 2020.

**Table D-1: Changes in enforcement activities, actions, and results in FYs 2019 and 2020**

	<b>FY 2019 enforcement results<sup>a</sup> (all monetary values in 2018 USD)</b>	<b>FY 2020 enforcement results (all monetary values in 2018 USD)</b>
<b>Inspections (compliance monitoring activities)</b>	<ul style="list-style-type: none"> <li>• EPA inspections decreased by approximately 4 percent in FY 2019 compared to FY 2018, from 10,734 to 10,328.</li> <li>• While the downward trend continued into FY 2019, the rate of decrease slowed.</li> </ul>	<ul style="list-style-type: none"> <li>• EPA inspections decreased by approximately 17 percent in FY 2020 compared to FY 2019, to 8,584.</li> <li>• The number of inspections conducted as part of a national enforcement priority increased by 5 percent, from 1,464 in FY 2019 to 1,535 in FY 2020, while programmatic inspections decreased by 21 percent, from 8,878 in FY 2019 to 7,048 in FY 2020.</li> <li>• The EPA conducted 60 percent fewer inspections under SDWA in FY 2020 compared to FY 2019 (944 as compared to 2,384), which was the most dramatic decrease of any statute's inspections.</li> <li>• The two statutes under which the EPA increased inspection activities were CWA, where inspections increased from 2,428 to 2,593 (7 percent), and FIFRA, where inspections increased from 301 to 1,086 (261 percent).</li> </ul>

	<b>FY 2019 enforcement results<sup>a</sup> (all monetary values in 2018 USD)</b>		<b>FY 2020 enforcement results (all monetary values in 2018 USD)</b>	
<b>Case initiations</b>	<ul style="list-style-type: none"> <li>EPA case initiations—in the form of compliance orders, penalty orders, and referrals to the DOJ—decreased in FY 2019 compared to FY 2018.</li> <li>There were 87 cases referred to the DOJ in FY 2019, 13 percent fewer than the prior low of 100 case referrals in FY 2018.</li> </ul>		<ul style="list-style-type: none"> <li>EPA case initiations—in the form of compliance orders, penalty orders, and referrals to the DOJ—decreased in FY 2020 compared to FY 2019.</li> <li>There were 63 cases referred to the DOJ in FY 2020, 28 percent fewer than the prior low of 87 case referrals in FY 2019.</li> <li>The number of EPA case initiations declined in FY 2020 for all major statutes.</li> </ul>	
<b>Case conclusions</b>	<ul style="list-style-type: none"> <li>The EPA concluded 1,680 cases in FY 2019, 7 percent fewer than in FY 2018.</li> </ul>		<ul style="list-style-type: none"> <li>The EPA concluded 1,595 cases in FY 2020, 5 percent fewer than in FY 2019.</li> <li>The percentage of enforcement actions concluded under a national enforcement priority increased from 17 percent in FY 2019 to 27 percent in FY 2020.</li> </ul>	
<b>Injunctive relief</b>	<ul style="list-style-type: none"> <li>The number of concluded enforcement actions with injunctive relief decreased by 17 percent, from 1,233 in FY 2018 to 1,028 in FY 2019.</li> </ul>		<ul style="list-style-type: none"> <li>The number of concluded enforcement actions with injunctive relief decreased by 12 percent, from 1,028 in FY 2019 to 905 in FY 2020.</li> </ul>	
	<ul style="list-style-type: none"> <li>Concluded enforcement actions resulted in \$4.35 billion in injunctive relief in FY 2019, up 9 percent from FY 2018.</li> <li>43 percent of the FY 2019 injunctive relief resulted from an enforcement action against the City of New York.</li> </ul>		<ul style="list-style-type: none"> <li>Concluded enforcement actions resulted in \$2.43 billion in injunctive relief in FY 2020, down 44 percent from FY 2019.</li> <li>45 percent of the FY 2020 injunctive relief resulted from an enforcement action against the Guam Power Authority and Marianas Energy Company.</li> </ul>	
<b>Penalties</b>	<ul style="list-style-type: none"> <li>The number of concluded enforcement actions with a penalty decreased by 12 percent, from 1,088 to 960.</li> </ul>		<ul style="list-style-type: none"> <li>The number of concluded enforcement actions with a penalty decreased by 2 percent, to 943.</li> </ul>	
	<ul style="list-style-type: none"> <li>The EPA assessed \$354 million in penalties in FY 2019, which was more than 400 percent higher than in FY 2018.</li> <li>73 percent of the FY 2019 penalty dollars resulted from a single enforcement action against Fiat Chrysler.</li> </ul>		<ul style="list-style-type: none"> <li>The EPA assessed \$154 million in penalties in FY 2020, 56 percent lower than in FY 2019.</li> <li>30 percent of the FY 2020 penalty dollars resulted from an enforcement action against Hyundai, and an additional 10 and 8 percent stemmed from enforcement actions against Kohler and Harley-Davidson, respectively.</li> </ul>	

	<b>FY 2019 enforcement results<sup>a</sup> (all monetary values in 2018 USD)</b>		<b>FY 2020 enforcement results (all monetary values in 2018 USD)</b>	
<b>SEPs</b>	<ul style="list-style-type: none"> <li>The number of SEPs decreased by 18 percent, from 99 in FY 2018 to 81 in FY 2019.</li> </ul>		<ul style="list-style-type: none"> <li>The number of SEPs decreased by 49 percent, from 81 in FY 2019 to 41 in FY 2020.</li> </ul>	
	<ul style="list-style-type: none"> <li>The total SEP value decreased 12 percent from FY 2018 to FY 2019, from \$29 million to \$26 million.</li> </ul>		<ul style="list-style-type: none"> <li>The total SEP value decreased 69 percent from FY 2019 to FY 2020, from \$26 million to \$8 million.</li> </ul>	
<b>Pollution commitments</b>	<ul style="list-style-type: none"> <li>The EPA concluded 3 percent more enforcement actions that included pollution commitments in FY 2019 than in FY 2018.</li> </ul>		<ul style="list-style-type: none"> <li>The EPA concluded 16 percent more enforcement actions that included pollution commitments in FY 2020 than in FY 2019.</li> <li>The EPA concluded 49 percent of those cases under FIFRA. The EPA concluded 161 fewer enforcement actions with pollution commitments under all other statutes.</li> </ul>	
	<ul style="list-style-type: none"> <li>Concluded enforcement actions in FY 2019 resulted in 347 million pounds of pollution commitments, 19 percent more than in FY 2018.</li> </ul>		<ul style="list-style-type: none"> <li>Concluded enforcement actions in FY 2020 resulted in 427 million pounds of pollution commitments, 23 percent more than in FY 2019.</li> <li>65 percent of the FY 2020 pounds of pollution commitment resulted from a single enforcement action against Detroit Edison.</li> </ul>	
<b>Waste commitments</b>	<ul style="list-style-type: none"> <li>The number of concluded enforcement actions with waste commitments decreased from 42 in FY 2018 to 31 in FY 2019, a 26 percent decrease.</li> </ul>		<ul style="list-style-type: none"> <li>The number of concluded enforcement actions with waste commitments decreased from 31 in FY 2019 to 28 in FY 2020.</li> </ul>	
	<ul style="list-style-type: none"> <li>Concluded enforcement actions resulted in 99 percent fewer pounds of waste commitments, from 541 million in FY 2018 to 5 million in FY 2019.</li> </ul>		<ul style="list-style-type: none"> <li>Concluded enforcement actions resulted in over 300 times more pounds of waste commitments, from 5 million in FY 2019 to 1.6 billion in FY 2020.</li> <li>More than 99 percent of the FY 2020 pounds of waste commitments resulted from a single enforcement action against Simplot Phosphates.</li> </ul>	

	FY 2019 enforcement results <sup>a</sup> (all monetary values in 2018 USD)		FY 2020 enforcement results (all monetary values in 2018 USD)	
<b>Cleanup commitments</b>	<ul style="list-style-type: none"> <li>Compared to FY 2018, the number of concluded enforcement actions with cleanup commitments decreased by 22 percent in FY 2019, from 102 to 80.</li> </ul>		<ul style="list-style-type: none"> <li>Compared to FY 2019, the number of concluded enforcement actions with cleanup commitments was nearly the same, decreasing from 80 to 79.</li> <li>Those 79 commitments were 68 percent fewer than the peak of 244 in FY 2012.</li> </ul>	
	<ul style="list-style-type: none"> <li>Concluded enforcement actions produced 95 percent fewer cubic yards of cleanup commitments, from 245 million cubic yards in FY 2018 to 13 million cubic yards in FY 2019.</li> </ul>		<ul style="list-style-type: none"> <li>Concluded enforcement actions produced eight times more cubic yards of cleanup commitments, from 13 million cubic yards in FY 2019 to 104 million cubic yards in FY 2020.</li> <li>94 percent of the FY 2020 cubic yards of cleanup commitments resulted from a single enforcement action against Foster Wheeler Energy Corporation.</li> </ul>	

Source: OIG analysis of the EPA's annual enforcement data. (EPA OIG table)

<sup>a</sup> EPA OIG, *EPA's Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018*, [20-P-0131](#), March 31, 2020.

## Agency Response to Draft Report



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

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

March 26, 2021

### MEMORANDUM

**SUBJECT:** Response to Office of Inspector General Draft Project No. OA&E-FY19-0030, "Resource Constraints, Leadership Decisions, and Workforce Culture Led to a Decline in Federal Enforcement," dated February 17, 2021

**FROM:** Lawrence E. Starfield, Acting Assistant Administrator

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STARFIELD  
Digitally signed by  
LAWRENCE STARFIELD  
Date: 2021.03.26  
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**TO:** Kathlene Butler, Director for Water Issues  
Office of Evaluation

Thank you for the opportunity to respond to the issues and recommendations in the subject draft audit report (report). The following is a general response to the report, along with responses to each of the report recommendations. For the report recommendations, we have provided high-level intended corrective actions and estimated completion dates. For your consideration, we have included a Technical Comments Attachment to supplement this response in the form of a redline/strikeout version of the draft report.

### OVERALL POSITION

We appreciate the Office of Inspector General's (OIG) attention to EPA's enforcement program. We wish to raise the following points of emphasis.

#### **I. Chapter 2/Recommendations 1 and 2**

*1. Assess the needs of the agency's enforcement program by completing a workforce analysis to determine the level of staffing necessary to achieve and maintain a strong enforcement presence in the field that protects human health and the environment.*

*2. Integrate the results of the workforce analysis into the Office of Enforcement and Compliance Assurance's annual and strategic planning processes.*

EPA implements a robust national enforcement program. Along with our state, tribal, territorial, and local partners, we have demonstrated that enforcement is essential to reducing pollution, leveling the playing field for regulated companies, and protecting public health in communities across the country, including those disproportionately affected by pollution. Our committed workforce has demonstrated resilience and creativity in confronting new and existing public health and environmental challenges and has embraced innovative approaches and advances in technology to best protect the people we serve. We value transparency and provide more than a terabyte of readily accessible information on our enforcement activities – second to none in the federal government.

Between FY 2007 and FY2019, our formal enforcement actions alone have garnered enforceable commitments for:<sup>1</sup>

- 4.71 billion pounds of pollution reduced (Air, Toxics & Water) (FY 2012-FY 2020 only – Starting in FY 2012 the methodology for calculating environmental benefit information changed. Therefore, data are not available for years prior to then.);
- 6.41 billion cubic yards of soil and water to be cleaned up;
- Over \$137 billion in environmental compliance actions and injunctive relief; and
- \$10.3 billion in civil penalties assessed.

Our criminal enforcement program has obtained sentences in cases totaling:

- \$5.57 billion in fines and restitution;
- \$7.23 billion in court ordered projects; and
- 1,364 years of incarcerations.

Our public-facing database averages three million views every year.

We acknowledge the OIG's finding that many enforcement metrics have declined from FY 2007 to FY 2019, and that enforcement resources have also significantly declined over the same time period. The report also correctly notes that since FY 2006, the size and level of activity of key sectors that EPA regulates has increased, and EPA is addressing the potential concerns from several "emerging contaminants."

We disagree, however, with the report's recommendations to overcome these obstacles by conducting a workforce analysis. The Office of Enforcement and Compliance Assurance (OECA) has made a number of adjustments to our enforcement program throughout this time period to ensure we are maintaining a solid national enforcement presence and addressing the most serious noncompliance. In essence, we have been conducting gap analyses and making targeted workforce adjustments from year to year. We believe these are more appropriate

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<sup>1</sup> Monetary values are in nominal dollars, not adjusted for inflation.

methods for achieving the goal of aligning our resources to our work. We address the workforce analysis recommendation more fully below.

### **Managing Resources:**

As the report indicates, enforcement funding has declined since FY 2006. The agency is aware of this history, and OECA and senior managers in the regions are fully engaged in the ongoing budget formulation process for FY 2022 and beyond. As part of that process, we are analyzing the needs and planned activities for the enforcement program. This year, the analysis includes consideration of the enforcement program's contributions to the Biden/Harris Administration priorities, including environmental justice and climate change.

During past years, which saw a decline in resources, we made a number of adjustments to our enforcement program to ensure we are maintaining a solid national enforcement presence and addressing the most serious non-compliance issues. For example, we have:

- Prioritized cases that may have a higher impact on public health protection but are more resource intensive.
- Prioritized work on national initiatives that focus on areas where we believe enforcement can significantly contribute to public health and environmental protection. The current six initiatives were selected after extensive outreach to the states and the public in order to identify a handful of programs for which enforcement could be most impactful in protecting human health and the environment.
  - Creating Cleaner Air for Communities by Reducing Excess Emissions of Harmful Pollutants
  - Stopping Aftermarket Defeat Devices for Vehicles and Engines
  - Reducing Hazardous Air Emissions from Hazardous Waste Facilities
  - Reducing Risks of Accidental Releases at Industrial and Chemical Facilities
  - Reducing Significant Non-Compliance with National Pollution Discharge Elimination System (NPDES) Permits
  - Reducing Non-Compliance with Drinking Water Standards at Community Water Systems
- Established national Centers of Excellence to provide centralized expertise and national enforcement coverage for certain programs. Creating these Centers alleviates the burden of maintaining expertise for every program in every region.<sup>2</sup>

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<sup>2</sup> We have created a Center of Excellence for Asbestos, Hazard and Emergency Response Act (AHERA), Clean Water Act (CWA) biosolids, and Clean Air Act (CAA) ozone-depleting substances. We have also established a pairing approach for portions of the Toxics Substances Control Act (TSCA): an "investing region" has the authority to pursue enforcement within its own region as well as its paired, non-investing, region.

- Regions have cross-trained many of their inspectors to have expertise across multiple programs, so that they can spot multiple types of violations in the course of a single inspection.
- For the past 10 years, each region has prepared a confidential Regional Strategic Plan. The plans identify priorities as well as staffing gaps or potential disinvestments. These plans are discussed with OECA Headquarters and have led to resource decisions needed to maintain strong programs.
- OECA Headquarters holds regular in-person or video teleconference meetings with each region at least twice each year. We discuss priorities, challenges, and staffing needs. We have established a Regional Budget Action Committee comprised of regional Enforcement and Compliance Assurance Division (ECAD) deputy directors and budget staff from OECA to manage budget priorities and develop options to address concerns.

**Workforce Analysis:**

A workforce analysis would not, by itself, address any resource imbalance, and as a tool to redistribute existing full-time equivalents (FTE), we do not believe that a workforce analysis is warranted. In our experience, workforce analyses are expensive, time-consuming, and a cause of discord, and they also can create a false sense of analytical precision. Rather, as articulated above, we believe that we have consistently made – and can continue to make – targeted workforce adjustments to align our resources to agency priorities. As new policy directions are articulated by the Biden/Harris Administration, we will continue to make adjustments to ensure alignment with those policies.

However, if we do receive additional resources in the future, we do support a streamlined needs assessment to identify any FTE imbalances between current FTE and the enforcement workload expected in the future. Informed by that assessment, we would then convene high-level meetings among senior managers in the regions and headquarters to discuss the best way to allocate new resources.

Corrective Actions: OECA will conduct a high-level needs assessment to inform distribution of any additional resources provided to OECA in the FY 2022 budget and beyond. This assessment will be considered during future planning discussions.

**II. Chapter 3/Recommendation 3**

*3. Use the results of the Office of Inspector General’s 2019 Enforcement Survey and other resources to identify and address areas of concern for the enforcement program, including through issuing new or revised policies, as appropriate.*

We also agree that policy choices have a significant impact on enforcement trend data. For example, as the report notes:

*[T]he agency made strategic choices regarding the types of non-compliance to monitor and the types of enforcement cases to pursue. For example, we found that a strategic shift, which began during the mid-2000s and continued through 2018, refocused agency enforcement resources on bigger cases against the most serious violators that significantly impacted human health and the environment. (pp 24-25)*

We believe that those were sound decisions that maximized the enforcement program's ability to deliver environmental protection results to the American people. Indeed, the report also accurately indicates that the focus on bigger cases and the move away from pursuing small cases resulted in higher median enforcement outcomes, such as penalties and injunctive relief. Big cases can provide a significant health and environmental benefit to communities as well as provide a deterrence to non-compliance.

This specific policy choice also reflects the appropriate role of the federal enforcement program. Most states are authorized for the major regulatory programs and conduct far more inspections as the direct program implementers than the federal government. Many states lack the resources and expertise to pursue complex, deep-dive investigations and inspections which are generally necessary to produce enforcement actions with high injunctive relief values or penalties. EPA also has the benefit of referring complex cases to the Department of Justice, so that the combined expertise of both agencies can be brought to bear on the most serious cases. We agree that "coverage inspections" are an important element in deterrence, but the states are better equipped to conduct these activities. Even so, as asserted by a former OECA Assistant Administrator, EPA does conduct some routine inspections to demonstrate a field presence and to serve as a deterrent to non-compliance.

The OIG report states that certain policies issued in the prior administration negatively impacted enforcement activity. President Biden revoked Executive Orders 13892 and 13924 which set out additional requirements for the administrative enforcement process, and he directed agencies to revoke all implementing guidance. We have done so. We have also reconsidered, and revised as appropriate, policies that were found to hamper the enforcement process. Additionally, the Department of Justice has rescinded a number of policies impacting enforcement, including several that limited the use of Supplemental Environmental Projects. We plan to discuss all enforcement policies with our new Assistant Administrator for OECA when she/he is named and will make policy adjustments as appropriate.

### **Survey and Identified Areas of Concern**

We appreciate the information gleaned from the survey that OIG conducted. Of course, it is not surprising that policy choices are met with varying degrees of enthusiasm by individual employees. Agency policy is primarily formulated by political leadership based on issue analyses, discussions with partner agencies, and other factors. Of course, input from staff is also valued, and in that context, the areas of concern identified by survey respondents may be considered by leadership in future policy setting, as appropriate.

Corrective Actions: We will brief the new Assistant Administrator for OECA on the results of the survey and identify to him/her existing policies which may impact the effectiveness of our enforcement program.

### **III. Chapter 4/Recommendations 4-8**

OECA generally agrees that providing additional contextual information regarding its enforcement results, including more information about compliance monitoring activities and environmental benefits, could be beneficial for public understanding of our activities and their impact. However, addressing recommendations 4-8 would require a significant level of effort and would divert OECA's limited resources away from work to increase our compliance monitoring and enforcement presence. In addition, we do not believe that some of these recommendations would actually result in an increased public understanding of our enforcement activities and the public health and environmental impact they may have on communities.

*4. Incorporate additional enforcement information and data into future annual enforcement results reports to provide context for (a) compliance monitoring activities conducted by the agency and (b) the estimated environmental benefits achieved through agency enforcement actions.*

OECA's Annual Results is not simply a report, but a series of information sources providing:

- A general overall description of the year's results in narrative form;
- Narratives to describe particular accomplishments in priority areas (such as national initiatives);
- Descriptions of specific case results;
- Charts and tables showing key numerical activities and outcomes and their trends over a 10-year period; and
- Additional numerical results for additional measures and regional breakdowns.

We provide these different products as our audience for the Annual Results is composed of many different stakeholders: Congress, the media, state/tribal/local governments, public interest groups, the regulated community, and the public at large. As a significant public release each year, OECA focuses its top-line messages on issues of broad public interest and provides more specific results on key measures and trends.

Page 50 of the report includes a table of specific possible additional contextual elements for this recommendation. These elements appear to fall into three categories: 1) providing additional context on type and complexity of activities (compliance monitoring, hazardous substance cleanups); 2) grouping pollutant reduction results by categories of pollutants or more detailed results on specific pollutants of concern; and 3) including breakdowns of activities/actions by statute and EPA region. Our response to this recommendation takes each in turn.

First, OECA does not believe that it can provide sufficient contextual information on "complexity" of inspections or cleanups in a concise manner for use by the public at large in its Annual Results. Decisions about "complexity" are inherently subjective. We have not found a good solution to categorize all inspections or cleanups in this fashion with precision, which is

why we report the total number of inspections and the total number of cleanup enforcement actions. We would agree, however, to add language recognizing the variability in these areas to our existing caveats. For the FY 2020 Annual Results, OECA created a page titled “Known Data Problems” which provides important information on how to interpret the results. We will retitle this page to read “Known Data Problems and Aids to Data Interpretation” and then add to this page a description of the variability in inspections and cleanup activities to provide aid in interpreting the data for these measures.

Second, for the same reason, trying to categorize classes of pollutants by their severity or risk is inherently challenging, and so to group pollutant reductions in this fashion is likely to be confusing or misleading to the public. This is why we report the total mass of pollutants reductions from air, water, and toxics emissions/releases. We would agree, however, to include additional explanation on the “Known Data Problems...” page to provide aid in interpreting these data.

With respect to the first and second categories of additional contextual elements, we would further note that the Annual Results webpage contains detailed descriptions of specific notable cases which discuss specific pollutant reductions achieved, information about cleanup activities, and other similar information. These give additional context to the summary tables. And we also include the “Numbers at a Glance” table, which include additional measures of environmental benefits achieved.

For the third category of suggested changes, breakdowns by statute and region, OECA already provides access to this information. All of the data provided in the Annual Results that comes from the Integrated Compliance Information System (ICIS) is also available on Enforcement and Compliance History Online (ECHO) for download. A user can download the data into an Excel spreadsheet and sort by these categories as well as many others. In addition, as discussed further in the response to Recommendation 8, the new ECHO EPA/State Dashboards for CAA stationary sources, CWA NPDES, Resource Conservation and Recovery Act (RCRA) hazardous waste, Safe Drinking Water Act (SDWA), and Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), provide, or soon will provide, the capability to sort data across several years by region, state, tribe, and other criteria. ECHO provides detailed information at a facility level, including information on inspections and enforcement actions. We believe that continuing to invest in transparency through our ECHO database is a better method of providing critical data to the public, rather than focusing on aggregated data in the Annual Results.

Corrective Actions:

- a) OECA will add to its “Known Data Problems and Aids to Data Interpretation” webpage descriptions of the variability in complexity of inspections and cleanups;
- b) OECA will add to the “Known Data Problems...” webpage descriptions of the different types and risks associated with key pollutants;
- c) OECA will retitle the ECHO “State Dashboards” as the “EPA/State Dashboards” on relevant webpages; and
- d) OECA will note on the “Known Data Problems...” webpage the availability of data broken out by statute, region, or state via the ECHO “EPA/State Dashboards.”

*5. Establish additional measures for agency-led compliance assistance activities and informal enforcement actions and include these new measures in future annual enforcement results reports with the appropriate context.*

*6. Evaluate the annual enforcement performance measures to assess whether additional context should be provided for other reported measures or whether additional measures should be included in future reports to fully capture the scope of the agency's enforcement program.*

OECA proposes combining Recommendation 5 with Recommendation 6. Both recommendations pertain to measures and context for the measures in future Annual Results or other results reports.

OECA agrees with the recommendation to evaluate annual enforcement performance measures to assess whether additional context should be provided for other reported measures or whether additional measures should be included in future reports to fully capture the scope of the agency's enforcement program. In FY 2021, EPA will begin developing a new strategic plan that would set the agency's direction for the next five years. Once the new administration is in place, OECA will review its current measures and consider new ones to capture the scope of the enforcement program that would support both OECA's and the agency's goals. We acknowledge the importance of providing information to facilitate proper interpretation of data and measures and will evaluate additional sources of information that would provide context for our measures supporting the agency strategic plan.

We note that compliance assistance and informal enforcement were both compliance assurance tools of interest to the prior administration. Additionally, OECA tracked compliance assistance (CA) for many years. The data did not, however, enable us to measure the impact on compliance or gauge the benefit of the effort. Given the resource drain and lack of benefit for tracking these activities, we eliminated the requirement to track them. Research shows CA to be most effective when the regulated entity is motivated to seek assistance. For these reasons OECA invests in 17 [Compliance Assistance Centers](#) that support a variety of regulated sectors. The enforcement program continues to provide compliance assistance through other efforts including issuing compliance alerts.

On data limitations, the GAO enforcement audit (GAO 21-82) recommended that "OECA should include the known limitations of data in its annual reports and provide information on the intended use of EPA's data," as referenced in this OIG draft report. OECA has completed that recommendation and will update the webpage as necessary for any new context for existing or new measures. These links support the completion of the GAO recommendation. Known data issues related to Annual Results can be found at [Identified Limitations with Analyzing Annual Result Data and Charts](#). In addition, see [Known Data Problems](#) for known problems in Enforcement and Compliance History Online (ECHO).

Corrective Action: Conduct an evaluation of OECA performance measures, including compliance assistance and informal enforcement actions, upon issuance of the agency's new strategic plan later this year.

*7. Develop and track non-compliance rates within environmental programs, or other measures that would indicate success of enforcement activities at returning entities back to compliance.*

OECA agrees with the value and utility of tracking non-compliance rates within environmental programs and implementing creative measures that would indicate success of a compliance assurance activity returning a facility to compliance. Being able to demonstrate positive change in the rate of compliance would be the ideal measure of program effectiveness.

Unfortunately, deriving compliance rates and determining whether our actions produce compliance is expensive, diverts limited resources, and ultimately is not currently achievable with available data. Specifically:

1. Most environmental laws and regulations do not require reporting of information that allows for determination of a compliance rate. As discussed in the OIG 2007 report and the current report, most states are either authorized or delegated to implement the major enforcement and monitoring programs. EPA does only a fraction of the national enforcement and compliance assurance work. EPA data alone is not sufficient to determine overall compliance rates and the states are not required to provide all their environmental data to EPA.
2. Measuring compliance rates is very difficult and expensive to do. As the OIG noted in its 2007 report, developing a statistically-valid compliance rate as a baseline, or to measure the effect of enforcement activities on the compliance rate, requires either data on the compliance status of a random sample of regulated facilities or data reported on the entire universe. For a program where compliance is monitored mostly through inspections, facilities selected for inspection must be chosen randomly. Yet, due to resource constraints, neither EPA nor authorized state/local programs typically conduct random inspections. Instead, facilities generally are targeted based on data indicating they have a proportionally higher probability of violation, in response to public tips and complaints, and in discussions with state and local authorities. While this approach ensures significant problems are more likely addressed and uses compliance and enforcement resources most efficiently, use of these inspections to determine a compliance rate would bias the rate upwards and would not be sound.

Consistent with OECA's response to the 2007 report, "OECA has in fact made conscious management choices on how best to use enforcement resources.... Because inspection resources are finite, every random inspection conducted means sacrificing a targeted inspection likely to identify violations. Thus, OECA's challenge has been and will continue to be to carefully and effectively balance its measurement approaches with its mission of protecting public health and the environment."<sup>3</sup>

3. A transition to measuring compliance rates for all the environmental programs would require changes to policies, and, in some cases, statutory or regulatory modifications.

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<sup>3</sup> [EPA OIG, \*Overcoming Obstacles to Measuring Compliance: Practices in Selected Federal Agencies\*, 2007-P-00027, June 20, 2007.](#)

For these reasons, OECA has measured instead the quantifiable outcomes of our enforcement activities discussed in the report: value of injunctive relief, penalties, pollutant reductions, etc., to ensure we are allocating resources to the most significant environmental and compliance concerns and generating deterrence against noncompliance.

One program for which the problem of measuring the compliance rate has been overcome is in the NPDES Program under the CWA. The NPDES program relies primarily on self-reporting of effluent data for compliance monitoring rather than inspections. Permittees are statutorily required to submit discharge monitoring reports (DMRs). The DMR data, when compared to permit effluent limits, allow for automated compliance determinations. EPA promulgated a rule requiring DMRs to be electronically submitted to support our ability to gauge compliance across this sector. It has taken significant effort by both EPA and authorized states to shift from paper-based reporting to electronic-based reporting in the program. Based on the unique availability of compliance rate data in this program, OECA included reducing the rate of significant non-compliance in the NPDES program as one of its six national initiatives for FY 2020-FY 2023. Where we can calculate the compliance rate, we are committed to using that metric to measure and improve compliance and program performance.

Another area with movement to assessing compliance is the agency's Drinking Water Learning Agenda. OECA is working with the Office of Ground Water and Drinking Water to evaluate ways to effectively improve community water system compliance. In FY 2021, we will begin assessing whether the agency has access to the data necessary to determine a compliance rate for this program.

Corrective Actions: Conduct a study of the NPDES SNC national initiative at its conclusion to determine the impact, including overall costs and benefits, of using compliance rates to establish performance expectations on overall NPDES compliance. Develop possible lessons learned for application to other similar programs (e.g., the SDWA Public Water System program), where self-monitoring is also a key method for determining compliance.

*8. Develop and publish a dashboard on the Enforcement Compliance History Online website that shows trends in agency-led enforcement activities and actions, similar to the dashboards the agency has already prepared for state enforcement programs.*

OECA agrees that providing information on EPA enforcement actions in an easy-to-use dashboard format is important for public transparency. We have nearly completed work that we believe meets the intent of this recommendation. The existing State Dashboards already provide information on EPA as well as state activities, as the report notes on page 50. And, in particular, OECA has updated the air, water, and hazardous waste dashboards in the past year to move them to a new software platform that provides additional functionality – the same platform that powers the internal dashboard discussed on pages 7-8 of the report. [The new water dashboard was posted to the public ECHO website on March 1, 2021; the illustration on page 50 of the report shows the now-retired version.] The new dashboards allow the user to select for EPA or state activities to be displayed alone and also allow for selecting particular EPA regions or states. The drinking water State Dashboard is in the process of being updated in a similar manner and should be available to the public by June 30, 2021.

OECA proposes completion of the updated drinking water State Dashboard as the remaining corrective action for this recommendation. We would be happy to provide a demonstration and/or training to the OIG on the new dashboards' capabilities. Finally, we note that the term "State Dashboards" may be somewhat confusing in that they contain EPA compliance and enforcement data as well, so, as mentioned in our response to Recommendation 4, we will change the name on relevant webpages to refer to the products as the "EPA/State Dashboards."

Corrective Action: Change the name of the State Dashboards to be the "EPA/State Dashboards." Complete the updated drinking water EPA/State Dashboard.

#### **IV. Appendices**

As the report indicates, even as there has been a national downward trend in many metrics, there is a lot of variability year to year, program to program, and region to region. Appendix B of the report goes into great detail regarding various regional increases or decreases between various years for compliance monitoring activities, initiations, conclusions, or environmental benefits. This is to be expected. Regions vary significantly in terms of resources and in terms of the numbers and types of facilities present within their regional footprint. Each region balances the need to address national priorities and regional priorities within the resources they have. Further, as the report points out, the conclusion of a single large case can significantly skew the data for injunctive relief, penalties, or environmental benefits. We would expect for there to be significant differences between regions and between regions and headquarters, with respect to the various metrics discussed in the report.

Similarly, as reflected in Appendix C, there are differences in outcomes from the various statutory programs. This is also not surprising. For example, every city in America that operates a wastewater treatment system is subject to the CWA. Many of these systems support large populations and manage tons of sewage. It is not surprising, therefore, that the CWA accounts for a significant number of inspections and other enforcement outputs.

#### CONCLUSION

Thank you for your detailed evaluation of these enforcement trends and the opportunity to provide feedback on the draft report. We look forward to further discussions with you on these important issues.

#### RESPONSE TO REPORT RECOMMENDATIONS

Our office indicates acceptance of the OIG recommendations, as qualified, in the table below.

##### **Agreements**

No	OIG Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion by Quarter and FY

1	Assess the needs of the agency's enforcement program by completing a workforce analysis to determine the level of staffing necessary to achieve and maintain a strong enforcement presence in the field that protects human health and the environment.	OECA will conduct a high-level needs assessment to inform distribution of any additional resources provided to OECA in the 2022 budget and beyond. This assessment will be considered during future planning discussions.	4 <sup>th</sup> Q FY 21
2	Integrate the results of the workforce analysis into the Office of Enforcement and Compliance Assurance's annual and strategic planning processes.	OECA will conduct a high-level needs assessment to inform distribution of any additional resources provided to OECA in the 2022 budget and beyond. This assessment will be considered during future planning discussions.	4 <sup>th</sup> Q FY 21
3	Use the results of the Office of Inspector General's <i>2019 Enforcement Survey</i> and other resources to identify and address areas of concern for the enforcement program, including through issuing new or revised policies, as appropriate.	We will brief the new Assistant Administrator for OECA on the results of the survey and identify to him/her existing policies which may impact the effectiveness of our enforcement program.	4 <sup>th</sup> Q FY 21
4	Incorporate additional enforcement information and data into future annual enforcement results reports to provide context for (a) compliance monitoring activities conducted by the agency and (b) the estimated environmental benefits achieved through agency enforcement actions.	<p>OECA will add to its "Known Data Problems and Aids to Data Interpretation" webpage accompanying its Annual Results descriptions of the variability in complexity of inspections and cleanups.</p> <p>OECA will add to the "Known Data Problems..." webpage descriptions of the different types and risks associated with key pollutants.</p> <p>OECA will retile the ECHO "State Dashboards" as the "EPA/State Dashboards" on relevant webpages.</p>	<p>2/28/22</p> <p>2/28/22</p> <p>5/1/21</p>

		OECA will note on the “Known Data Problems...” webpage the availability of data broken out by statute, Region, or State via the ECHO “EPA/State Dashboards.	2/28/22
5	Establish additional measures for agency-led compliance assistance activities and informal enforcement actions and include these new measures in future annual enforcement results reports with the appropriate context.	Conduct an evaluation of OECA performance measures, including compliance assistance and informal enforcement actions.	12/31/21
6	Evaluate the annual enforcement performance measures to assess whether additional context should be provided for other reported measures or whether additional measures should be included in future reports to fully capture the scope of the agency’s enforcement program.	Conduct an evaluation of OECA performance measures, including compliance assistance and informal enforcement actions.  --Assess need for additional context for the measures in the Annual Results.	12/31/21  2/28/22
7	Develop and track non-compliance rates within environmental programs, or other measures that would indicate the success of enforcement activities at returning entities back to compliance.	Conduct a study of the NPDES SNC NCI at its conclusion to determine the impact, including overall costs and benefits, of using compliance rates to establish performance expectations on overall NPDES compliance. Develop possible lessons learned for application to other similar programs (e.g., the SDWA Public Water System program), where self-monitoring is also a key method for determining compliance.	4 <sup>th</sup> Q FY 23

8	Develop and publish a dashboard on the Enforcement Compliance History Online website that shows trends in agency-led enforcement activities and actions, similar to the dashboards the agency has already prepared for state enforcement programs.	Change the name of the State Dashboards to be the “EPA/State Dashboards.”  Complete the updated drinking water EPA/State Dashboard.	5/1/21  5/31/21
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CONTACT INFORMATION

If you have any questions regarding this response, please contact Gwendolyn Spriggs (OECA) at [spriggs.gwendolyn@epa.gov](mailto:spriggs.gwendolyn@epa.gov) or 202-564-2439.

Attachment:

Technical Comments

## ***Revised Agency Corrective Actions for Recommendations 3, 4, 5, and 7***

On April 7, 2021, the audit team met with OECA staff and managers to discuss the Agency's response to recommendations and the proposed high-level intended corrective actions. Based on this meeting, the audit team made a minor revision to Recommendation 7. The Agency provided revised high-level corrective actions and milestones for Recommendations 3, 4, 5, and 7 to supplement its original response on April 13, 2021.

No	OIG recommendation	High-level intended corrective action(s)	Estimated completion by quarter and fiscal year
3	Use the results of the <i>OIG's 2019 Enforcement Survey</i> and other resources to identify and address areas of concern for the enforcement program, including through issuing new or revised policies, as appropriate.	We will review the results of the survey and brief the Assistant Administrator for OECA on the results of the survey, identifying existing policies and other areas of concern which may impact the effectiveness of our enforcement program, and recommending changes as appropriate.	FY 21 Q4
4	Incorporate additional enforcement information and data into future annual enforcement results reports to provide context for (a) compliance monitoring activities conducted by the Agency and (b) the estimated environmental benefits achieved through Agency enforcement actions.	<ol style="list-style-type: none"> <li>1. OECA will add to its "Known Data Problems and Aids to Data Interpretation" webpage accompanying its Annual Results descriptions of the variability in the complexity of compliance monitoring activities, such as inspections, and cleanups.</li> <li>2. OECA will add to the "Known Data Problems..." webpage descriptions of the different types and risks associated with key pollutants associated with environmental benefits achieved through agency enforcement actions.</li> </ol>	<ol style="list-style-type: none"> <li>1. FY22 Q2</li> <li>2. FY22 Q2</li> </ol>

No	OIG recommendation	High-level intended corrective action(s)	Estimated completion by quarter and fiscal year
		<p>3. OECA will retitle the ECHO “State Dashboards” as the “EPA/State Dashboards” on relevant webpages.</p> <p>4. OECA will note on the “Known DataProblems...” webpage the availability of data broken out by statute, Region, or State via the ECHO “EPA/State Dashboards.”</p>	<p>3. FY 21 Q3</p> <p>4. FY 22 Q2</p>
5	<p>Establish additional measures for Agency-led compliance assistance activities and informal enforcement actions and include these new measures in future annual enforcement results reports with the appropriate context.</p>	<p>1. Define EPA-issued informal and formal enforcement actions.</p> <p>2. Develop reporting instructions for reporting newly defined EPA-issued informal enforcement actions.</p> <p>3. If the evaluation of OECA performance measures pursuant to Recommendation 6 identifies EPA-led compliance assistance activities and EPA-led informal enforcement actions as Agency priorities, decide whether and how to track and measure these activities/actions.</p>	<p>1. FY 22 Q2</p> <p>2. FY 22 Q3</p> <p>3. FY 22 Q4</p>
7	<p>Develop and track noncompliance rates within environmental programs or use other innovative approaches that would indicate the success of enforcement activities at returning entities to compliance.</p>	<p>Continue to study the impacts of our compliance assurance tools on the regulated community, using evidence-based compliance research. As part of the E-enterprise Leadership Council, working with our state, tribal and academic partners we will develop a compliance learning agenda. The learning agenda will identify the most pressing compliance programmatic questions and identify a series of evidence-building research projects intended to answer those questions.</p>	<p>FY22 Q3</p>

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