



U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INSPECTOR GENERAL



FYs 2020–2021
U.S. Environmental
Protection Agency

Top Management Challenges



Abbreviations

C.F.R.	Code of Federal Regulations
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
EPA	U.S. Environmental Protection Agency
FY	Fiscal Year
GAO	U.S. Government Accountability Office
IT	Information Technology
OIG	Office of Inspector General
OPM	U.S. Office of Personnel Management
U.S.C.	United States Code

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At a Glance

What Are Management Challenges?

According to the GPRA Modernization Act of 2010 (GPRA stands for Government Performance and Results Act), “major management challenges”—hereafter referred to as *top management challenges*—are programs or management functions within or across agencies that have greater vulnerability to waste, fraud, abuse, and mismanagement, and where a failure to perform well could seriously affect the ability of an agency or the federal government to achieve its mission or goals.

Per the Reports Consolidation Act of 2000, each fiscal year the Office of Inspector General identifies top management challenges for the U.S. Environmental Protection Agency.

In each of our audit and evaluation reports, we will note in the “At a Glance” page, as well as on the first page of the report, which management challenges the report addresses, if applicable.

Address inquiries to our public affairs office at (202) 566-2391 or OIG_WEBCOMMENTS@epa.gov.

List of [OIG reports](#).

EPA’s FYs 2020–2021 Top Management Challenges

What We Found

Identifying and resolving top management challenges is essential to the EPA’s protection of human health and the environment.

The EPA faces significant challenges in accomplishing its mission in FYs 2020 and 2021, and perhaps beyond. The challenges that we previously identified in the FY 2019 management challenges report (Report No. [19-N-0235](#), issued July 15, 2019) remain, but new circumstances have created additional challenges that may prevent the Agency from fulfilling its responsibilities and meeting its goals. Our work, the work of the U.S. Government Accountability Office, and Agency documents and statements point to eight categories of challenges:

- 1. Maintaining Operations During Pandemic and Natural Disaster Responses.** The EPA needs to maintain human health and environmental protections, business operations, and employee safety during the coronavirus pandemic and future natural disasters.
- 2. Complying with Key Internal Control Requirements.** The EPA faces the following overarching challenges in implementing and operating internal controls that establish and maintain an effective work environment:
 - a. Developing **internal control risk assessments**.
 - b. Ensuring **quality data**.
 - c. Creating effective operational **policies and procedures**.
- 3. Overseeing States, Territories, and Tribes Responsible for Implementing EPA Programs.** The EPA faces a challenge in improving its oversight of and the results received from state, territory, and tribal environmental programs.
- 4. Improving Workforce/Workload Analyses to Accomplish EPA’s Mission Efficiently and Effectively.** The EPA needs ongoing and comprehensive workload analyses to adequately respond to and prepare for future staffing gaps and shortages in essential positions.
- 5. Enhancing Information Technology Security to Combat Cyberthreats.** Without enhanced information technology security, the EPA remains vulnerable to existing and emerging cyberthreats.
- 6. Communicating Risks to Allow the Public to Make Informed Decisions About Its Health and the Environment.** The EPA needs to provide individuals and communities with sufficient information to make informed decisions to protect their health and the environment.
- 7. Fulfilling Mandated Reporting Requirements.** The EPA must meet its congressionally mandated report requirements.
- 8. Integrating and Leading Environmental Justice Across the Agency and Government.** The EPA needs to enhance its consideration of environmental justice across programs and regions and provide leadership in this area.



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

THE INSPECTOR GENERAL

July 21, 2020

MEMORANDUM

SUBJECT: EPA's FYs 2020–2021 Top Management Challenges
Report No. 20-N-0231

FROM: Sean W. O'Donnell

A handwritten signature in blue ink, reading "Sean W O'Donnell", is placed next to the name in the "FROM:" field.

TO: Andrew Wheeler, Administrator

As required by the Reports Consolidation Act of 2000, the Office of Inspector General is providing the issues we consider to be the U.S. Environmental Protection Agency's top management challenges.

The Inspector General Act of 1978, as amended, directs inspectors general to provide leadership to agencies through audits, evaluations, and investigations, as well as additional analyses of agency operations. According to the GPRA Modernization Act of 2010 (GPRA stands for Government Performance and Results Act), "major management challenges"—which we refer to as *top management challenges*—are programs or management functions within or across agencies that have greater vulnerability to waste, fraud, abuse, and mismanagement, where a failure to perform well could seriously affect the ability of an agency or the federal government to achieve its mission or goals.

Annually, our office publicly reports on top management challenges, whereby we reassess the major challenges that affect and influence EPA operations. The enclosed management challenges report reflects findings and themes resulting from many such efforts conducted by the EPA OIG this past year. Drawing high-level EPA attention to these key issues is an essential component of the OIG's mission. This report summarizes what we consider to be the most serious management and performance challenges facing the Agency. It also assesses the Agency's progress in addressing those challenges. This report and its findings will be an important foundation for charting the path of future OIG audits and investigations.

For this report, the OIG conducted a survey of all EPA headquarters offices and discussed management challenges in outreach meetings with Agency offices to request feedback on how these challenges affect the EPA's business and operations. To develop this year's management challenges, we considered, among other sources, information provided by the EPA in addition to the work of the OIG, the U.S. Government Accountability Office, and public statements by EPA leaders to the press and Congress. These challenges will guide our future assignments as we work to assist the EPA in achieving its goals to protect human health and the environment.

In this report, we retained the management challenges that we identified in fiscal year 2019. We introduced the challenge of responding to the coronavirus pandemic and other disasters, as well as an overarching internal control challenge that encompasses program and regional office risk assessments, data quality, and policies and procedures. We also introduced as a top management challenge the integration and enhancement of environmental justice issues across the Agency and government. We would be pleased to discuss these matters with you and address any questions you may have.

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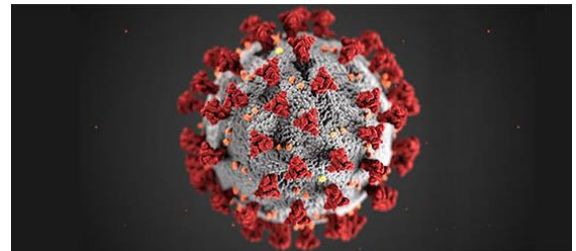
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CHALLENGE: Maintaining Operations During Pandemic and Natural Disaster Responses



CHALLENGE FOR THE AGENCY

The U.S. Environmental Protection Agency must adapt to protect human health and the environment amid the coronavirus pandemic and natural disasters. The Agency's mission to protect human health and the environment comes into sharp focus as the Agency continues to respond to the 2020 coronavirus pandemic—that is, the SARS-CoV-2 virus and resultant COVID-19 disease. At the same time, EPA response and support capabilities need to be available to support natural disaster response during the 2020 hurricane and wildfire seasons. The Agency's responsibilities for implementing federal environmental laws also continue, even as resources and capabilities shift throughout these overlapping events.



(Centers for Disease Control and Prevention image)

This cross-cutting challenge touches on other EPA management challenges, such as the EPA's oversight of states, territories, and tribes; risk communication; and workforce analyses. This challenge also raises new risks in monitoring preexisting contracting and grant funds, as well as those funds directly helping to alleviate the crises.

Risk to EPA's Mission Achievement: Successful Implementation of Programs

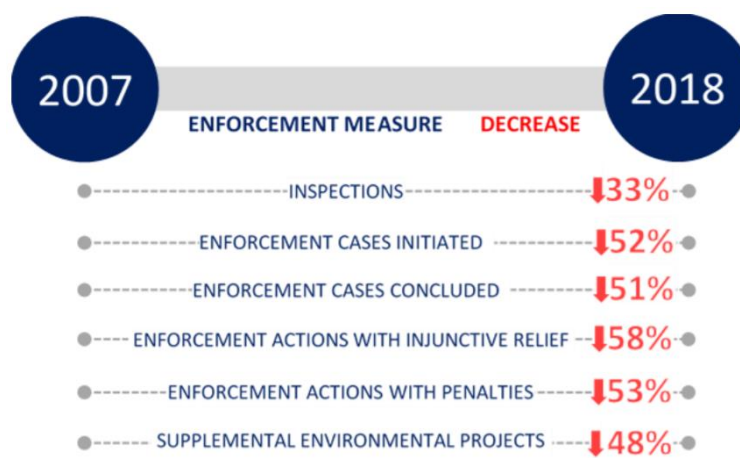
Achieving the EPA's mission relies on effective implementation of federal environmental laws and regulations, which are designed to protect human health and the environment. Appropriate regulations and effective enforcement are key to combating and deterring violations of law, including fraud.

Fraud Identification. Inspections of recent imports have identified products marketed with unsubstantiated and dangerous claims of being able to protect against the SARS-CoV-2 virus. Companies are also fraudulently claiming that their products are approved or endorsed by the EPA or contain EPA-approved disinfectants for use against the SARS-CoV-2 virus. The prevalence of fraud related to EPA programs and operations will most likely increase as fraudsters identify new ways to exploit consumers frightened by the coronavirus pandemic. In an April 2020 news release, EPA Administrator Andrew Wheeler stated that the EPA takes seriously its responsibility to protect Americans from fraudulent surface disinfectants and that he has met with online retailers and others to ask for their help in preventing imposter products from coming to market. The Office of Inspector General's Office of Investigations has opened many cases involving fraudulent disinfectant products to protect the integrity of the EPA's programs and the American people.

Disinfectant Approval. One of the EPA’s most immediate responses to the coronavirus pandemic has involved approving disinfectants that can kill the SARS-CoV-2 virus on surfaces. The EPA has also developed a list of products that are registered to destroy viruses known to be as difficult—if not more difficult—to kill than the SARS-CoV-2 virus. In addition, to address pesticide supply chain shortages, the EPA is temporarily allowing companies to change—without prior EPA approval, as is typically required—the suppliers of certain active ingredients in approved products.

Regulatory Program Implementation. During the coronavirus pandemic, the EPA has made many adjustments to programs and operations by, for example, issuing regulatory waivers and making exceptions to regulatory requirements, policy, and internal controls. However, these adjustments create new risks that the Agency will not identify or address noncompliance. The EPA has implemented a temporary enforcement policy that curtails several routine regulatory monitoring and enforcement activities during the coronavirus pandemic. In the face of these adaptations, the EPA must maintain a robust regulatory and enforcement program to ensure environmentally protective practices and to address environmental violations and deter noncompliance. Reduction in regulatory and enforcement activity places the EPA’s mission at greater risk and threatens the Agency’s overall mission to protect human health and the environment.

On May 20, 2020, Administrator Wheeler testified before Congress that, since March 16, 2020, the Agency has opened 52 criminal enforcement cases, charged ten defendants, concluded 122 civil enforcement actions, initiated another 115 civil enforcement actions, secured \$21.5 million in Superfund response commitments, billed more than \$20 million in Superfund oversight costs, and attained commitments from parties for cleanup of 68,000 cubic yards of contaminated soil and water.¹ However, we observed in a March 31, 2020 interim report that the EPA’s enforcement activities and its resources for conducting routine regulatory enforcement work have declined over time.² In fact, based on our analysis of the information available in the Agency’s database, the number of civil administrative cases the EPA initiated continued the downward trend that we observed in our interim report.



The EPA’s enforcement measures decreased when comparing FYs 2007 and 2018. (OIG graphic)

Program Oversight. As described in the management challenge “Overseeing States, Territories, and Tribes Responsible for Implementing EPA Programs,” states, territories, and tribes often act as the

¹ *Oversight of the Environmental Protection Agency, before the Senate Committee on Environment and Public Works, 116th Congress (2020)* (statement of Andrew Wheeler, EPA administrator).

² OIG, *EPA’s Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018*, Report No. [20-P-0131](#), March 31, 2020.

frontline implementers of federal environmental laws on the EPA's behalf. As a result of the coronavirus pandemic and natural disasters, these entities face financial and personnel challenges that may limit their ability to adequately implement federal requirements. The OIG is reviewing the EPA's ability to conduct emergency response during the coronavirus pandemic.³

In addition, during responses to natural disasters, the EPA and the Federal Emergency Management Agency encounter not only personnel shortages, but also utility and infrastructure damage that may render drinking water and wastewater treatment inoperable for a period of time.⁴ Infrastructure damage inhibits the federal government's ability to assess environmental conditions and accurately communicate those conditions to the public in a timely fashion. The EPA has recognized this challenge, emphasizing the additional pressure placed on drinking water utilities during the coronavirus pandemic. In a March 27, 2020 press release, Administrator Wheeler said, "Having fully operational drinking water and wastewater services is critical to containing COVID-19 and protecting Americans from other public health risks. Our nation's water and wastewater employees are everyday heroes who are on the frontline of protecting human health and the environment every single day."⁵ Additional planning, assistance, and oversight by the EPA is necessary to support states, territories, tribes, and local utilities that are facing a strain on their resources amid the coronavirus pandemic and when natural disasters hit. The OIG will review the EPA's assistance to tribal drinking water facilities in the face of the coronavirus pandemic.⁶



An EPA response team meets for a safety briefing before assessing sites in Tampa, Florida. (EPA photo)

Environmental Justice Considerations. Data from the Centers for Disease Control and Prevention show higher rates of hospitalization or death among non-Hispanic Black persons, Hispanics and Latinos, and American Indians/Alaska Natives. On June 9, 2020, the House Energy and Commerce Subcommittee on Environment and Climate Change held a hearing titled "*Pollution and Pandemics: COVID-19's Disproportionate Impact on Environmental Justice Communities.*" The subcommittee agreed that

³ OIG Notification Memorandum, *Survey of EPA On-Scene Coordinators and Managers Regarding COVID-19*, Project No. [OA&E-FY20-0240](#), June 15, 2020.

⁴ OIG, *EPA Region 6 Quickly Assessed Water Infrastructure after Hurricane Harvey but Can Improve Emergency Outreach to Disadvantaged Communities*, Report No. [19-P-0236](#), July 16, 2019; and OIG, *Region 4 Quickly Assessed Water Systems After Hurricane Irma but Can Improve Emergency Preparedness*, Report No. [20-P-0001](#), October 7, 2019.

⁵ EPA, "EPA Urges States to Support Drinking Water and Wastewater Operations during COVID-19," [News Release](#), March 27, 2020.

⁶ OIG Notification Memorandum, *EPA's Oversight of Tribal Drinking Water Systems*, Project No. [OA&E-FY20-0044](#), May 29, 2020.

environmental justice is a priority highlighted by the coronavirus pandemic. One representative stated that the EPA's deregulatory actions have left many communities wondering who will protect their health and safety. Another representative added that pollution burdens can also have a disproportionate impact on people with chronic underlying health problems and on disadvantaged communities.

In April 2020, the EPA made grants available for public education, training, and emergency planning for environmental justice communities—which are communities that can be disproportionately impacted by negative environmental factors—across the country that have been impacted by the COVID-19 disease. Currently, the OIG is tracking environmental justice issues on several ongoing projects, including our review of the EPA's implementation of Title VI, which prohibits recipients of federal financial assistance from discriminating on the basis of race, color, or national origin when implementing programs and activities.⁷ More information can be found under the management challenge “Integrating and Leading Environmental Justice Across the Agency and Government.”

Contract Oversight. The OIG has consistently raised concerns about the EPA's oversight of contracts. This oversight responsibility is complicated by new funds and requirements associated with the government's response to the coronavirus pandemic. For example, the EPA faces a new challenge in contract management as a result of Section 3610 of the Coronavirus Aid, Relief, and Economic Security Act, known as the CARES Act. This Act authorizes—but does not require—agencies to reimburse contractors the cost of paid leave for their personnel who are unable to access a government-approved facility or telework because their jobs cannot be performed remotely. Our review of the EPA's plans for implementation of Section 3610 found that the Office of Acquisition Solutions created and provided detailed guidance to EPA contracting personnel and contractors related to reimbursements under Section 3610. Two Office of Acquisition Solutions—issued guidance documents—the Implementation Plan and the Contractor Supplemental Invoice Instructions—specifically capture the purpose of and implementation steps for Section 3610. We did not find any evidence that the EPA's guidance, as revised, was inconsistent with the statute.⁸

Paying contractors under the CARES Act may benefit the economy by keeping contractors and their staff financially solvent. However, if the EPA makes the payments, it risks falling short of funds to meet its mission requirements. The EPA has advised that funds for Section 3610 will come from program offices, which impacts the current fiscal year's program funding. According to the EPA, no additional funds have been provided by Congress to the Agency to reimburse contractors under the Act. Senior resource officials for EPA program offices must therefore determine whether funds are available and whether it is in the best interest of the government to reimburse contractors under a particular contract.

⁷ OIG Notification Memorandum, *Effectiveness of EPA's External Civil Rights Compliance Office in Determining Title VI Compliance in Organizations Receiving EPA Funding (2nd notification)*, Project No. [OA&E-FY19-0357](#), February 13, 2020.

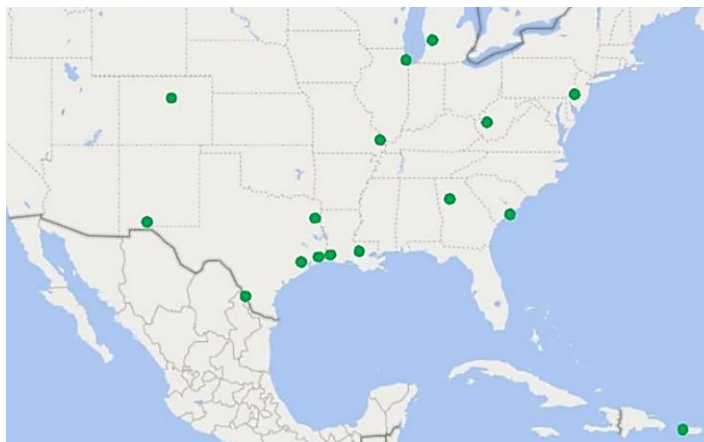
⁸ OIG, *EPA's Initial Implementation of CARES Act Section 3610*, Report No. [20-N-0202](#), June 29, 2020.

Risk Communication. We have previously found that the EPA faces challenges in communicating risks to the public during natural disasters. For example, despite concerns about air quality and other issues in the area of Houston, Texas, after Hurricane Harvey, the EPA did not adequately communicate important information so that all impacted communities received it.⁹ In the aftermath of Hurricane Harvey, the EPA’s emergency response staff stationed in Houston handed out pamphlets and responded to telephone calls; informed non-English-speaking communities about issues including disposing of hazardous waste; and disinfected drinking water and worked with septic systems after flooding. However, the regional staff did not provide all residents in Houston-area communities sufficient quantities of translated pamphlets, including those in Spanish.¹⁰



From left: English, Spanish, and Vietnamese versions of EPA flyers regarding debris management. (EPA images)

Other OIG reports have also identified risk communication as an Agency challenge, including a March 2020 management alert on ethylene oxide-emitting facilities.¹¹ The issues we identified in that alert may persist or increase in severity as some of these facilities—particularly those that provide medical sterilization services—are further strained to address coronavirus pandemic-related issues. The lessened regulatory oversight noted above may produce environmental or public health risks, which may warrant additional communication to affected communities. The continuing challenge of communicating risk is described more broadly in this report under the management challenge “Communicating Risks to Allow the Public to Make Informed Decisions About Its Health and the Environment.”



Metropolitan areas in the United States where there is at least one census tract in which ethylene oxide is a significant risk driver for cancer. (OIG-developed image based on the 2014 National Air Toxics Assessment and information from the EPA)

⁹ OIG, *EPA Needs to Improve Its Emergency Planning to Better Address Air Quality Concerns During Future Disasters*, Report No. [20-P-0062](#), December 16, 2019.

¹⁰ OIG, *EPA Region 6 Quickly Assessed Water Infrastructure after Hurricane Harvey but Can Improve Emergency Outreach to Disadvantaged Communities*, Report No. [19-P-0236](#), July 16, 2019.

¹¹ OIG, *Management Alert: Prompt Action Needed to Inform Residents Living Near Ethylene Oxide-Emitting Facilities About Health Concerns and Actions to Address Those Concerns*, Report No. [20-N-0128](#), March 31, 2020.



[Video](#) providing background and findings regarding air quality and other issues in the Houston area after Hurricane Harvey. (OIG video and imagery)

Risks to EPA's Operations: Maintaining a Safe and Productive Workforce

When executed, Continuity of Operations plans allow organizations to maintain required business practices when normal operations are not prudent or possible. Including telework in the plan allows a greater number of employees to continue working in those situations. However, navigating a new environment where Continuity of Operations plans are implemented continuously for several months creates new technological and operational challenges to achieve the EPA's mission and to keep its workforce safe and productive.

Personal Protective Equipment Procurement and Provision. As the Agency continues its work during the coronavirus pandemic, it must ensure that its field employees—inspectors, educators, on-scene coordinators, and others—can protect their own safety and the safety of those with whom they interact. This requires the EPA to procure additional personal protective equipment and adapt existing protocols. The OIG will review the EPA's ability to coordinate emergency response during this time, including whether equipment and other resources were available for on-scene coordinators.¹²

Cybersecurity Enhancement. Cybersecurity is a continuing EPA management challenge that has become more critical during the coronavirus pandemic. Continuing EPA



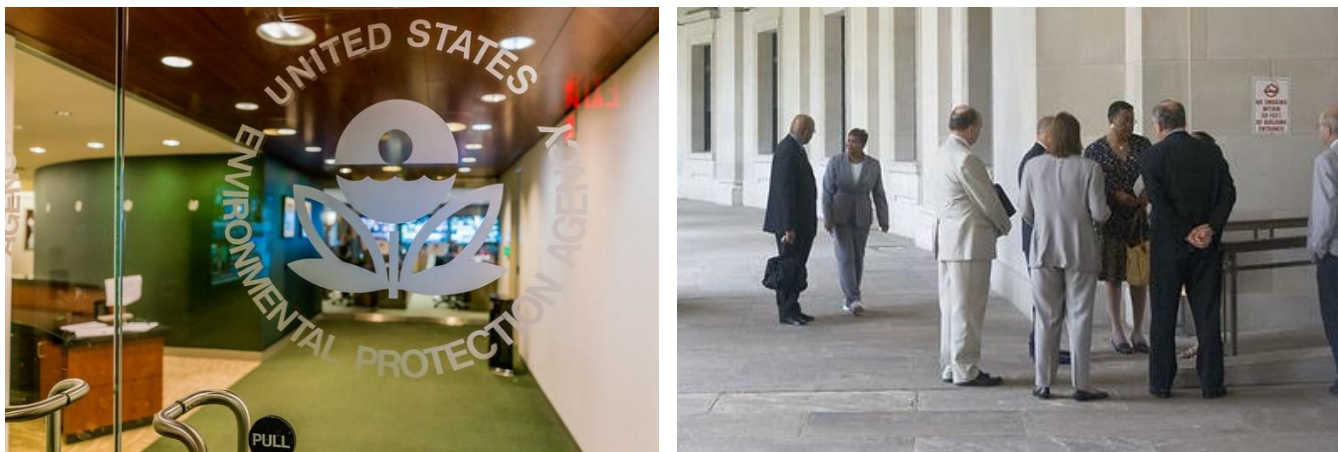
Personal protective equipment at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. (EPA photo)

¹² OIG Notification Memorandum, *Survey of EPA On-Scene Coordinators and Managers Regarding COVID-19*, Project No. [OA&E-FY20-0240](#), June 16, 2020.

operations in the face of the coronavirus pandemic has required the Agency to adapt its network to support a primarily virtual workforce and provide an unprecedented number of remote employees with a reliable, stable means to communicate and access critical applications and data. Information technology help-desk functions can be delayed by an overtaxed IT staff, who must now also deploy and manage new tools and technology.

Unprecedented levels of remote access also increase the risk of security breaches of remotely stored and transmitted data, as well as the introduction of malicious software to the Agency network. In addition, the number of remote employees working at the same time may overtax the information system capacity levels. OIG reviews of the Agency's compliance with the Federal Information Security Modernization Act of 2014 and with the Federal System Security Plan requirements will include determinations of how the Agency's activities have accounted for the challenges raised by the coronavirus pandemic.¹³ The continuing challenge of communicating this risk is described more broadly in this report under the management challenge "Enhancing Information Technology Security to Combat Cyberthreats."

Safe Return to Facilities. The EPA will need to keep its facilities clean, promote social distancing, and follow protection protocols so that its workforce is safe. Per the associate deputy administrator in a July 16, 2020 email, the EPA has 125 EPA facilities across the country. The federal government has established requirements for returning the federal workforce to its facilities safely, and the EPA began implementing these practices in some locations as early as late May 2020. The OIG will review the EPA's plans for personnel reentering office buildings.¹⁴



Left to right: EPA office door. Employees gathered outside an EPA headquarters building entrance. (EPA photos)

¹³ OIG Notification Memorandum, *FY 2020 EPA's Compliance with the Federal Information Security Modernization Act of 2014*, Project No. [OA&E-FY20-0033](#), May 5, 2020; OIG, *Evaluation of EPA's Information Systems' Compliance with Federal System Security Plans Requirements (2nd notification)*, Project No. [OA&E-FY20-0176](#), May 6, 2020.

¹⁴ OIG Notification Memorandum, *EPA's Strategies to Comply with Federal Guidelines for Reopening Facilities Closed Due to the Coronavirus Pandemic*, Project No. [OA&E-FY20-0241](#), July 1, 2020.

THE AGENCY'S ACTIVITIES

The EPA is addressing each challenge described above. To determine the effectiveness of the EPA's activities, the OIG is tracking and reviewing EPA responses to the coronavirus pandemic and assessing the risks of the EPA's emerging and existing activities to address the pandemic. For example, we initiated a broad research project to assess the EPA's activities across the country, and we began a project designed to broadly review the Agency's internal control activities under the CARES Act.¹⁵

¹⁵ OIG Notification Memorandum, *Research for Future Audits and Evaluations Regarding Effects of Coronavirus Pandemic (SARS-CoV-2 Virus and COVID-19 Disease) on EPA Programs and Operations*, Project No. [OA&E-FY20-0212](#), May 7, 2020; OIG Notification Memorandum, *Internal Controls Established to Implement Programs and Activities Funded under the CARES Act*, Project No. [OA&E-FY20-0234](#), June 10, 2020.

CHALLENGE: Complying with Key Internal Control Requirements

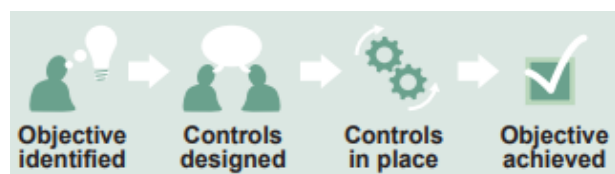


CHALLENGE FOR THE AGENCY

Effective internal controls are needed to achieve the Agency's mission and goals. The EPA's mission is to protect human health and the environment. To achieve that mission, the EPA established three goals:

1. A cleaner, healthier environment.
2. More effective partnerships with EPA stakeholders.
3. Greater certainty, compliance, and effectiveness.¹⁶

The road to achieving these goals requires effective and efficient implementation of hundreds of EPA programs, projects, and laws. The federal government has rules in place designed to give programs the best chance to achieve their objectives.¹⁷ The establishment and review of internal controls enable the



Source: GAO.

Agency to continuously improve programs and achieve program outcomes for the good of the American public.

Agencies are expected to comply with internal control standards, which are designed to help them achieve their goals. Robust internal controls provide reasonable assurance that (1) programs achieve their intended results; (2) resources are used in a manner consistent with the Agency's mission; (3) programs and resources are protected from waste, fraud, and mismanagement; (4) laws and regulations are followed; and (5) reliable and timely information is obtained, maintained, reported, and used for decision-making.

To improve agency internal controls, the Federal Managers' Financial Integrity Act of 1982 requires the comptroller general to issue *Standards for Internal Control in the Federal Government*.¹⁸ These standards establish five components that provide the overall framework for establishing and maintaining an effective internal control system. These five components cover all aspects of an entity's objectives. Annually, in conformance with the Act, EPA program offices and regions issue statements of assurance that indicate compliance with the requirements.¹⁹ However, the EPA's

Five Components of Internal Control

1. Control Environment
2. Risk Assessment
3. Control Activities
4. Information and Communication
5. Monitoring

¹⁶ EPA, [Working Together: FY 2018–2022 U.S. EPA Strategic Plan](#), February 2018 (Updated September 2019).

¹⁷ Office of Management and Budget Circular No. A-123, *Management's Responsibility for Enterprise Risk Management and Internal Controls*, July 16, 2016.

¹⁸ 31 U.S.C. § 3512(c).

¹⁹ The U.S. Government Accountability Office's *Standards for Internal Control in the Federal Government*, also referred to as the Green Book, is constructed around Office of Management and Budget Circular A-123.

programs lack key elements in three out of the five key internal controls: risk assessment, control activities, and information and communication. Without these key components, the EPA risks falling short of achieving Agency and program goals.

Consistently Assessing Program Risks

In its FY 2019 statements of assurance, the EPA stated that it had complied with the risk assessment requirements; however, our recent work shows that those statements are inaccurate. In a May 2020 OIG report, we found that the EPA was not conducting risk assessments for 20 programs that collectively cost over \$5.7 billion in FY 2018. Without these risk assessments, the EPA cannot be certain it has the proper procedures in place to address internal and external risks to these programs.²⁰

This component of internal control provides the basis for developing appropriate risk responses. Management assesses the risks the entity faces from both external and internal sources. Federal agencies are better able to protect operations from fraud, waste, abuse, and mismanagement when it knows the risks and develops plans to mitigate those risks. Specifically, when agency risks are not disclosed, other components of internal control may falter. Without adequate risk assessments, agencies cannot:

Internal Control Component 2: Risk Assessment

The agency is better able to protect operations from fraud, waste, abuse, and mismanagement when it knows the risks and develops plan to mitigate those risks.

- Clearly plan and execute the oversight and management of the control environment.
- Determine whether control activities are appropriate and sufficient.
- Determine whether the information and communication are accurate.
- Determine whether adequate monitoring is taking place.

Improving Controls Over Policies and Procedures

The EPA lacks a systematic process for regularly assessing the need for policy and procedure updates. In its 2019 Federal Managers' Financial Integrity Act letter, the EPA's Office of the Chief Financial Officer stated, "Many of the Agency's policies, procedures, and internal controls which cut across payroll, time and attendance, and human resources functions are in need of review and revision." The EPA strategic plan—specifically Objective 3.5, "Improve Efficiency and Effectiveness" under the goal of "Greater Certainty, Compliance, and Effectiveness"—discusses how the EPA will work to alleviate challenges associated with outdated or nonexistent policies. To ensure that the EPA is achieving its goals and objectives and to prevent fraud, waste, and abuse, the process of updating policies and procedures must evolve for the EPA to improve upon business processes and operations to promote transparency, efficiency, and effectiveness.

Internal Control Component 3: Control Activities

Control activities establish the policies, procedures, and practices required to respond to risks in agency programs. Policies and procedures should be based on agency risks and include steps to mitigate those risks.

²⁰ OIG, *EPA Needs to Conduct Risk Assessments When Designing and Implementing Programs*, Report No. [20-P-0170](#), May 18, 2020.

Our work continues to identify weaknesses in the Agency's updating of policies and procedures.²¹ In 2019, we recommended updating the travel policy, the Freedom of Information Act policy, and the *EPA Leave Manual*. We also recommended that the EPA revise the *Recognition Policy and Procedures Manual*. Our 2018 reports recommended that the Agency update human resources policies and develop an accurate and consistent policy and procedure for its debt waiver process. A 2020 report reiterated issues with the Agency's ability to address debt waivers.²²

The Agency also continues to face challenges with time-and-attendance processes. To properly administer and report time-and-attendance data, agencies should have internal controls in place that provide reasonable assurance that transactions are accurate and properly approved. Proper recording of time-and-attendance information refers to whether the information is complete, accurate, valid, and in compliance with applicable requirements. While the EPA has implemented corrective actions to improve those processes, our ongoing audit and investigative work continues to highlight such Agency weaknesses and vulnerabilities. These vulnerabilities stem from ineffective and outdated internal controls that allow employees to input—and managers to approve—time-and-attendance data that are incorrect or contrary to Agency policy. Subsequently, some employees have received improper payments, made untimely corrections to time-and-attendance data, or inappropriately charged the wrong leave category. We have identified unauthorized overtime charges, salary overpayments, and individual abuses related to employee time-and-attendance through our audit and investigative work.

In December 2019, we issued an internal control deficiency memorandum, *Time and Attendance Records Not Updated Prior to Payroll Certification Causing Salary Overpayments*, to the Office of the Controller. We identified 13 employees who received debt notices because their timekeepers and supervisors were not adjusting the employees' time-and-attendance data prior to payroll certification when the employees' were absent or unable to do so. In all cases, the 13 employees originally submitted their time-and-attendance data for the pay period as being in a paid status; however, the employees did not work their complete schedule and their time-and-attendance data were not updated or corrected prior to payroll certification. As a result, the employees received salary overpayments.

²¹ This applies to the following OIG reports:

- *EPA Needs to Improve Management and Monitoring of Time-Off Awards*, Report No. [20-P-0065](#), December 30, 2019.
- *Outdated EPA Leave Manual and Control Weaknesses Caused Irregularities in the Office of Air and Radiation's Timekeeping Practices*, Report No. [20-P-0063](#), December 19, 2019.
- *Follow-Up Audit: EPA Took Steps to Improve Records Management*, Report No. [19-P-0283](#), August 27, 2019.
- *Actions Needed to Strengthen Controls over the EPA Administrator's and Associated Staff's Travel*, Report No. [19-P-0155](#), May 16, 2019.
- *Management Alert: EPA Oversight of Employee Debt Waiver Process Needs Immediate Attention*, Report No. [18-P-0250](#), September 12, 2018.
- *Operational Efficiencies of EPA's Human Resources Shared Service Centers Not Measured*, Report No. [18-P-0207](#), May 31, 2018.

²² OIG, *EPA's Office of the Chief Financial Officer Lacks Authority to Make Decisions on Employee-Debt Waiver Requests*, Report No. [20-P-0194](#), June 15, 2020.

It is critical that the EPA establishes and follows up-to-date policies and procedures to mitigate Agency risks. Not doing so may lead managers to implement individual interpretations of federal guidance and policies, thereby creating inefficiencies and increasing the opportunity for fraud, waste, abuse, or mismanagement. Operating with outdated policies and procedures can lead to Agency efforts that are not aligned with its mission and goals.

Improving the Quality of Data Collected and Used for Program Decision-Making

We found that the EPA has not fully implemented internal controls for the mandatory EPA Quality Program.²³ The primary goal of the program is to ensure that the Agency’s environmental decisions are supported by data of known and documented quality. The lack of controls within the Quality Program reduces the EPA’s effectiveness in overseeing programs, making needed management decisions that directly impact public health, preventing significant financial and legal risks, and ultimately achieving its strategic goals. Per the GPRA Modernization Act of 2010,²⁴ agencies must describe how they will ensure the accuracy and reliability of data used to measure progress toward performance goals. To this end, the EPA has implemented policy and procedural guidance titled *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity, of Information Disseminated by the Environmental Protection Agency*.

Internal Control Component 4: Information and Communication

Management needs quality data to make program decisions and measure progress. Effective information and communication are vital for an entity to achieve its goals.

The EPA’s strategic plan Goal 3, “Greater Certainty, Compliance, and Effectiveness,” recognizes that “Environmental decision making across media programs requires access to high-quality data and analytics.” To accomplish this, the EPA plans to reduce reporting burden for submitting entities and improve data quality by having Agency programs, states, and tribes establish shared information services and agree to common standards and practices. Without these standardized business processes, the EPA concedes that it cannot achieve its goals.

OIG reports show that poor data quality and data gaps negatively impact the EPA’s effectiveness in overseeing programs that directly impact public health, such as managing air quality, drinking water, toxic releases to surface waters, Superfund sites, and environmental education. Data quality issues and data gaps also subject the EPA to significant financial risks and delayed cleanups, while the public sustains prolonged exposure to unsafe substances and restrictions on the use of natural resources. Specifically:



Graphic depicting data gaps. (OIG image)

- We found that the EPA’s Regions did not correctly track responsible parties for cleanups, compliance, or significant noncompliance with enforcement agreements or orders at Superfund hazardous waste cleanup sites. As a result, EPA headquarters could not consistently enforce

²³ OIG, *EPA Needs to Address Internal Control Deficiencies in the Agencywide Quality System*, Report No. [20-P-0200](#), June 22, 2020.

²⁴ “GPRA” stands for Government Performance and Results Act.

requirements for cleanup parties across the nation, nor could the EPA create or maintain a level playing field. Further, headquarters could not assess the adequacy of regional actions against noncompliant cleanup parties and assist when appropriate.²⁵

- In a 2017 audit, we found that the Toxics Release Inventory and the Discharge Monitoring Report Comparison Dashboard had limited utility for identifying possible surface water dischargers. Without this information, the EPA's ability to regulate facilities is limited. Further, the EPA's Pollutant Loading Tool could not identify unpermitted dischargers to surface water based on Toxics Release Inventory data, which means that the EPA and public cannot know when or how much pollution occurs from those dischargers.²⁶



Image of a 2005 fire at EQ Resource Recovery Inc. in Romulus, Michigan. (EPA photo)

- In a 2018 audit, we found that the EPA lacked data to determine the effectiveness of state-enhanced vehicle inspection and maintenance programs. Nine states operating enhanced programs did not conduct the required biennial program evaluations to assess the effectiveness of their programs in reducing vehicle emissions. Another four states did not conduct required on-road testing to obtain information on performance of in-use vehicles, and three states did not conduct required reviews and tests due to a lack of clarity in EPA guidance.²⁷



Vehicles idled in dense traffic. (EPA photo)

- The EPA's Office of Pesticide Programs did not have outcome measures to determine how well the emergency exemption process maintains human health and environmental safeguards. The office also did not have comprehensive internal controls to manage the emergency exemption data that it collects or consistently communicate that data with its stakeholders. Although the office collected human health and environmental data through its emergency exemption application process, it did not make those data available in its publicly accessible database or use the data to support outcome-based performance measures that capture the scope of each exemption or measure benefits or risks.²⁸

²⁵ OIG, *While EPA Regions Enforce at Six Superfund Sites Reviewed, Four of Those Sites Remain in Significant Noncompliance, and Nationwide Reporting and Tracking Can Be Improved*, Report No. [20-P-0011](#), October 24, 2019.

²⁶ OIG, *Analysis of Toxics Release Inventory Data Identifies Few Noncompliant Facilities*, Report No. [18-P-0001](#), October 5, 2017.

²⁷ OIG, *Collecting Additional Performance Data from States Would Help EPA Better Assess the Effectiveness of Vehicle Inspection and Maintenance Programs*, Report No. [18-P-0283](#), September 25, 2018.

²⁸ OIG, *Measures and Management Controls Needed to Improve EPA's Pesticide Emergency Exemption Process*, Report No. [18-P-0281](#), September 25, 2018.

THE AGENCY'S ACTIVITIES

Risk Assessment. In response to our May 2020 report on risk assessments (Report No. [20-P-0170](#)), the OCFO stated that it will revise and update the senior managers' and management integrity advisors' online training courses to include relevant information on the GAO's Green Book by December 30, 2020. The OCFO also stated that it will require assistant administrators and regional administrators to certify in their annual assurance letters by August 30, 2021, that all appropriate staff have taken the training. As the EPA risk assessment process matures, it will be better able to identify and mitigate risks to operations. The OIG will monitor the EPA's implementation of the risk assessment process. The annual EPA risk assessments should also consider the risks posed by the OIG-identified management challenges.

Control Environment. The Office of Mission Support's Office of Human Resources develops an annual policy agenda based on several factors: (1) changes to law, regulations, and other authorities; (2) senior management decisions; (3) OIG recommendations; and (4) customer feedback. Per the Office of Human Resources, the policies are prioritized, progress on each policy is tracked, and senior management is briefed on a regular basis.

While the EPA continues to implement OIG recommendations to update and improve its processes, our audit and evaluation program continues to highlight Agency weaknesses and vulnerabilities in this area. These vulnerabilities stem from existing policies and procedures that do not reflect current operations or needs and that allow for activities that are incorrect or contrary to other Agency policies. The EPA has been implementing some corrective actions in response to our recommendations. However, many corrective actions are still pending. In response to our audits, the EPA stated that it has an established process in place to identify priorities and updates pertaining to its policies and procedures. Although progress has been made, updating existing policies remains an important challenge. Agency management needs to commit to correcting ongoing problems with the EPA's policies and procedures, including streamlining and formalizing the process, dedicating resources, and making this management challenge a priority.

Information and Communication. EPA leadership needs to demonstrate commitment to verify the quality of data and adequately fill data gaps. To demonstrate this commitment, the Agency should have the people and processes in place to deploy Agency data policies and procedures across all programs and to actively manage data to improve quality and completeness. While a move to electronic reporting should ease the Agency's access to data and simplify reporting, the EPA still needs to verify and validate electronically reported data to ensure accuracy, timeliness, and proper format. Neither the EPA nor the OIG can fully assess the data quality or data gaps issues until the EPA executes its shared information services and develops common standards and practices with its partners.

Ongoing and future OIG audits and evaluations will continue to review this issue and how it impacts the EPA's strategic goals and issues, specifically as they relate to air, water, cleanup of hazardous waste sites, and chemicals. These areas and others rely on quality data to achieve Agency objectives.

CHALLENGE: Overseeing States, Territories, and Tribes Responsible for Implementing EPA Programs

CHALLENGE FOR THE AGENCY

States, territories, and tribes are key partners in executing the EPA’s mission to protect human health and the environment. The EPA authorizes

states and certain other entities like territories and tribal governments, collectively referred to as “states,” to implement many environmental laws—such as the Clean Air Act, Clean Water Act, Safe Drinking Water Act, and the Resource Conservation and Recovery Act—if they show that they have the capacity to operate programs consistent with national standards. According to the EPA, states have

assumed more than 96 percent of the delegable authorities under federal law.



Source: OIG graphic.

When the EPA delegates authority for a program to a state, the Agency retains oversight responsibility to provide reasonable assurance that states continue to protect human health and the environment. The EPA must monitor delegated programs to ensure that state implementation meets minimum federal standards. The EPA also retains authority to enforce environmental laws when states do not take appropriate enforcement. EPA headquarters and regional staff perform a variety of formal and informal oversight activities; however, there have been disparities in the effectiveness of delegated programs.

Strategic Planning Emphasizes Effective EPA Oversight

The EPA’s oversight of delegated programs is vital to ensure nationwide protection of human health and the environment. Oversight of delegated programs is thus a key tenet of the *FY 2018–2022 U.S. EPA Strategic Plan*. The plan highlights ways in which the EPA is improving oversight of state environmental programs, including:

- Approving local solutions such as implementation plans and emissions certification applications.
- Restating its oversight role as a coregulator.
- Working with local entities to ensure compliance with the law and establish consistency and certainty for the regulated community.

The EPA updated the *FY 2018–2022 U.S. EPA Strategic Plan* in September 2019. As it pertains to oversight, the most significant change was to Goal 2, as shown in Table 1.



Table 1: Change in Goal 2 of FY 2018–2022 U.S. EPA Strategic Plan

	Original issuance	September 2019 update
Title	Cooperative federalism	More effective partnerships
Purpose	Rebalance the power between Washington [D.C.] and the states to create tangible environmental results for the American people.	Provide certainty to states, localities, tribal nations, and the regulated community in carrying out shared responsibilities and communicating results to all Americans.

Source: EPA OIG analysis of original and revised versions of the *FY 2018–2022 U.S. EPA Strategic Plan*.

In addition, Administrator Wheeler issued an oversight memorandum titled *Principles and Best Practices for Oversight of Federal Environmental Programs Implemented by States and Tribes* on October 30, 2018. The memorandum aims to “provide certainty by setting expectations for state, tribal and federal roles and responsibilities and ensuring decisions are made in a timely fashion.”

External organizations and members of Congress have questioned the effectiveness of the administrator’s strategy based on declining state resources and examples of strained relationships between the EPA and the states, and our audits and evaluations have shown that much remains to be done to support effective implementation. The EPA’s Office of Enforcement and Compliance Assurance Assistant Administrator Susan Parker Bodine has said, “Our goal is to eliminate inefficient duplication with state programs, and to direct federal resources to help achieve the Agency’s core mission of improving air quality, providing for clean and safe water, revitalizing land and preventing contamination, and ensuring the safety of chemicals in the marketplace.”²⁹

Oversight Concerns Persist Across Programs

Overseeing delegated environmental programs is central to the EPA’s core functions. Congress designed most environmental statutes to be administered by state programs with robust federal oversight. Both states and the EPA make difficult decisions to prioritize limited resources. The OIG and the GAO continue to uncover issues with the EPA’s oversight of state environmental programs. From FYs 2016 through 2020, we have collectively issued at least 19 reports that show the continued prevalence of the issue and the actions the EPA has taken or plans to take.

Safe Drinking Water Act Implementation. In 2018 and 2019, we identified multiple issues with state implementation and oversight of drinking water programs. In a 2019 report, we found that the EPA does not have complete and nationally consistent information from states about public water systems’ compliance with public notice requirements.³⁰ As a result, the EPA cannot fully monitor compliance and oversee the implementation of this program. In July 2018, we concluded that the circumstances and response to the City of Flint, Michigan’s drinking water contamination involved implementation and oversight lapses at the EPA as well as at the state and city levels. Specifically, EPA Region 5 did not

²⁹ EPA, “EPA Announces 2019 Annual Environmental Enforcement Results,” [News Release](#), February 13, 2020.

³⁰ OIG, *EPA Must Improve Oversight of Notice to the Public on Drinking Water Risks to Better Protect Human Health*, Report No. [19-P-0318](#), September 25, 2019.

implement proper management controls that could have facilitated more informed and proactive decisions regarding the city's and state's implementation of the Safe Drinking Water Act requirements, such as the Lead and Copper Rule. Additionally, we found that the EPA did not fully employ its authorities under the Safe Drinking Water Act to require compliance in Flint. As such, our 2018 report recommended that the Agency implement a system for regional drinking water staff, managers, and senior leaders that would incentivize staff to elevate and managers to address important and emerging issues, in accordance with the EPA's January 2016 *Policy on Elevation of Critical Environmental and Public Health Issues*.³¹



Flint River in Flint. Image links to "Further Insight on Flint" [video](#). (OIG imagery and video)

In September 2018, the GAO also issued a report on state implementation and oversight of the drinking water requirements surrounding lead and copper. The GAO reported that few of the largest water systems had publicized inventories of lead service lines. Approximately 43 states informed the EPA that they intend to fulfill the Agency's request to work with water systems to publicize inventories of lead service lines. However, 39 states reported challenges in doing so. The GAO's review found that, as of January 2018, only 12 of the 100 largest water systems had publicized information on the inventory of lead service lines. The Agency had not followed up with all states since 2016 to share information about how to address these challenges. The EPA told the GAO that it was focused on state compliance with drinking water rules and not on following up with information on how states could address challenges. To encourage states to be more transparent to the public and support the Agency's oversight of the Lead and Copper Rule and objectives for safe drinking water, the GAO recommended that the EPA share information on successful approaches it had used to identify and publicize locations of lead service lines with all states.³² The EPA has since implemented corrective actions and the recommendation is now closed.

³¹ OIG, *Management Weaknesses Delayed Response to Flint Water Crisis*, Report No. [18-P-0221](#), July 19, 2018; OIG, *Management Alert: Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public*, Report No. [17-P-0004](#), October 20, 2016.

³² GAO, *DRINKING WATER: Approaches for Identifying Lead Service Lines Should Be Shared with All States*, [GAO-18-620](#), September 2018.

Clean Air Act Implementation. We have identified issues with the EPA’s oversight of state air programs. In a 2019 report, we concluded that Region 10 should improve its oversight activities to provide reasonable assurance that air particulate matter emissions testing programs conducted in the State of Washington meet federal requirements. Although we only reviewed stack test reports from Washington in EPA Region 10, EPA managers and staff responsible for overseeing the Clean Air Act program at the national level told us that they had observed similar problems in other states and EPA regions.³³



A smokestack. (EPA photo)

In a September 2018 report, we found that the EPA should collect additional program performance data to better assess the effectiveness of states’ enhanced inspection and maintenance programs for reducing vehicle emissions. Also, while the Agency strengthened its oversight of required annual reports from states about the performance of their vehicle inspection and maintenance programs, it did not consistently communicate errors in reports back to states.³⁴



Dense vehicular traffic in smog. (EPA photo)

THE AGENCY’S ACTIVITIES

We first reported this management challenge in FY 2008. Since then, the EPA has reviewed some of the inconsistencies in its oversight of state programs. The Agency has also used federal enforcement actions when states did not use their authority to protect human health and the environment. The EPA continues to develop and implement policies to improve consistency in its oversight of delegated programs. According to the Agency, the EPA has dedicated resources to address the oversight management challenge. Actions taken include:

- Implementing a real-time permit review process for the National Pollution Discharge Elimination System under the Clean Water Act.
- Creating a standard operating procedure for Clean Air Act Title V programmatic reviews.
- Developing a national permitting oversight policy that is expected to be finalized during FY 2020.

³³ OIG, *More Effective EPA Oversight Is Needed for Particulate Matter Emissions Compliance Testing*, Report No. [19-P-0251](#), July 30, 2019.

³⁴ OIG, *Collecting Additional Performance Data from States Would Help EPA Better Assess the Effectiveness of Vehicle Inspection and Maintenance Programs*, Report No. [18-P-0283](#), September 25, 2018.

While the EPA's actions, its Strategic Plan, and policy documents acknowledge state oversight as a legitimate management challenge, the Agency is not likely to fully meet this challenge in the near-term because of resource limitations and the complexity of the issue. Oversight of states is central to the EPA's mission. Our office has nine audits and evaluations related to this management challenge ongoing in FY 2020, and we anticipate additional assignments in FY 2021 that address the EPA's oversight of states.

CHALLENGE: Improving Workforce/Workload Analyses to Accomplish EPA’s Mission Efficiently and Effectively



CHALLENGE FOR THE AGENCY

Workforce planning affects the EPA’s capability to achieve strategic goals and

objectives. The EPA has not yet executed the required workforce plan to ensure that the Agency is well-staffed to achieve its goals and objectives of protecting human health and the environment. Workforce planning is an essential task of government agencies, designed to systematically identify and address the gaps between the workforce each agency has today and the one it needs to meet future needs. Workforce planning requirements are issued by the U.S. Office of Personnel Management and defined in 5 C.F.R. Part 250, Subpart B, Strategic Human Capital Management, effective April 11, 2017. The GAO has also identified strategic human capital management as a high-risk area. The GAO states that agencies need to take action to address mission-critical skills gaps within their workforces—a significant factor contributing to many high-risk areas.

The OIG and the GAO have both reported that the EPA has not incorporated workload analysis into its resource allocations. For example, in 2017, the OIG reported that the distribution of Superfund full-time equivalents among EPA Regions did not support the current regional workload. The GAO also reported in 2017 on EPA workload concerns.³⁵

Significant EPA Workforce Trends. In its FY 2019 Human Capital Operating Plan, the EPA reports that workforce levels declined by 2,447 full-time equivalents from FYs 2015 through 2018. In FY 2018, the percentage of the EPA workforce eligible to retire was 24.1 percent. The EPA states that on average, 4.4 percent of employees retire each year; however, it must be prepared for a large segment of its workforce to retire. In February 2020 testimony before the House Energy and Commerce Committee, Environment and Climate Change Subcommittee, Administrator Wheeler articulated some of EPA’s concerns about workforce trends and some of the ways the EPA is responding:

Right now, as of today, 40 percent of our workforce is eligible to retire. That’s why I hired a new human resources director last year. I actually interviewed the candidate for the human resources position, it was three or four levels below me. I was told that administrators never interview human resource directors. I want to make sure we got the hiring right for the EPA of the future.

The EPA can help address this issue through workforce planning and succession management.

³⁵ OIG, *EPA’s Distribution of Superfund Human Resources Does Not Support Current Regional Workload*, Report No. [17-P-0397](#), September 19, 2017; GAO, *GRANTS MANAGEMENT: EPA Partially Follows Leading Practices of Strategic Workforce Planning and Could Take Additional Steps*, [GAO-17-144](#), January 2017.

Five Phases of Workforce Planning

The OPM set out five phases to workforce planning:

1. Set strategic direction.
2. Analyze workforce, identify skill gaps, and conduct workforce analysis.
3. Develop an action plan.
4. Implement the action plan.
5. Monitor, evaluate, and revise the action plan.

The EPA has not yet initiated many of these phases for developing a workforce plan. Due to the broad implications for accomplishing the EPA's mission, we have included this management challenge since 2012.

Strategic human capital management has been on the GAO's High-Risk List since 2001.³⁶ Skill gaps across the federal government exist in areas vital to the EPA, such as science, engineering, acquisitions, and cybersecurity. The Agency will be competing for talent with other federal agencies as well as the private sector. This makes it even more critical that the EPA develop and execute workforce plans to address competency gaps and implement succession plans before problems hinder the Agency's mission.

Phase 1: Set Strategic Direction

The EPA set a strategy related to workforce planning in its strategic plan, which emphasizes that sustainable resource levels and a strong workforce are critical to success. Under Objective 3.5, "Improve Efficiency and Effectiveness," the EPA aims to provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission. The Agency does not include a long-term performance goal for workforce analysis, but it does discuss this important task:

EPA will ensure its workforce is positioned to accomplish the Agency's mission effectively by providing access to quality training and development opportunities that will improve staff's and managers' skills, knowledge, and performance, and prepare them to capitalize on opportunities that advance progress. EPA will improve its workforce planning and management, strengthen its Senior Executive Service, and focus on developing and maintaining a highly skilled technical workforce.

The EPA ties this objective to its annual plans through the FY 2021 congressional budget justification. In FY 2021, the EPA's congressional budget justification describes how the Agency will leverage workforce planning dashboards to advance human capital priorities by giving managers a strategic view of retirement eligibility, diversity information, occupational series, and grade levels. The dashboards

³⁶ GAO, *HIGH-RISK SERIES: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas*, [GAO-19-157SP](#), March 2019.

assist the EPA with succession planning by helping to identify workforce gaps due to anticipated retirements and attrition trends.

The Agency's strategic and annual plans promise to assist the EPA with workforce planning, but they do not include a comprehensive analysis or identify skills and gaps that would comprise an Agency workforce analysis. Our work has found that the EPA has not fully implemented controls and a methodology to determine workforce levels based upon analysis of the Agency's workload.

Phase 2: Analyze Workforce, Identify Skill Gaps, and Conduct Workforce Analysis

In the past, the EPA resisted performing an agencywide workforce analysis, instead opting to perform targeted workforce analyses. The OIG did not consider this approach sufficient because of the limited nature of the analyses. In 2017, 5 C.F.R. Part 250 required agencies to develop a Human Capital Operating Plan, which includes agencywide workforce planning.

The EPA is taking steps to comply with the regulation. The number of EPA employees is declining, with 4.4 percent of employees retiring each year. The EPA workforce declined by 2,447 full-time equivalents between 2015 and 2018. In addition, more than 42 percent of current employees are eligible to retire by 2023. According to a June 2018 article in *Government Executive*, the EPA has the second-greatest number of federal employees eligible to retire by 2023.³⁷ The Department of Housing and Urban Development was first, with 44.6 percent who could retire in 2023. The EPA has an urgent need to identify skill gaps that could result from these impending retirements; however, the EPA does not plan to identify the gaps until FY 2021.

Phase 2 of workforce planning involves:

- Determining what the current workforce resources are and how they will evolve through turnover.
- Developing specifications for the kinds, numbers, and location of workers and managers needed to accomplish the Agency's strategic requirements
- Determining what gaps exist between the current and projected workforce needs.

Phase 3: Develop an Action Plan

The Human Capital Operating Plan serves as a tool for Agency leadership to set a clear path for achieving stated human capital strategies, identifying and securing resources, determining time frames and measures to assess progress, and demonstrating how each Human Capital Framework system is being fulfilled. Agencies must update workforce planning and other elements in their Human Capital Operating Plans annually.

Phase 3 of workforce planning involves identifying strategies to close gaps, plans to implement the strategies, and measures for assessing strategic progress. These strategies could include such things as recruiting, training and retraining, restructuring organizations, contracting out, succession planning, and technological enhancements.

³⁷ Williams, J. Robert, "The Federal Agencies Where the Most Employees are Eligible to Retire," *Government Executive*, June 18, 2018.

In October 2019, the OPM reviewed the EPA’s Human Capital Operating Plan and identified both required and recommended actions to improve the Agency’s workforce planning.³⁸ In response to the OPM’s review, the EPA provided a corrective action plan stating that it will finalize a workforce plan by the fourth quarter of FY 2020. The EPA also plans to update the workforce plan in the second quarter of FY 2021 to identify skill gaps and closure strategies for mission-critical occupations.

Phases 4 and 5: Implement, Monitor, Evaluate and Revise the Action Plan

In the absence of a current workforce plan, the EPA cannot implement a meaningful monitoring, evaluation, and revision process. This final step will bring the workforce planning efforts to life and enable the Agency to meaningfully reduce the risks it currently faces from talent shortfalls or impending talent gaps. In March 2020, Administrator Wheeler told the House Appropriations Committee that the EPA “did not receive enough funding from Congress to fully fund our [full-time equivalent] ceiling of over 14,000 employees.” However, without a workforce plan, it is difficult to determine whether funding is indeed adequate and whether available funding goes to the highest priority needs.

Phase 4 involves ensuring that human and fiscal resources are in place, roles are understood, and the necessary communication, marketing, and coordination is occurring to execute the plan and achieve the strategic objectives.

Phase 5 involves monitoring progress against milestones, assessing for continuous improvement purposes, and adjusting the plan to make course corrections and address new workforce issues.

THE AGENCY’S ACTIVITIES

The EPA stated that it will finalize a workforce plan by the fourth quarter of FY 2020. The EPA also plans to update the workforce plan in the second quarter of FY 2021 to identify skill gaps and closure strategies for mission-critical occupations. The EPA is in the early stages of compliance with OPM requirements, and the OIG will continue to monitor the Agency’s progress.

³⁸ OPM, *Agency Compliance and Evaluation, Human Capital Management Evaluation of the U.S. Environmental Protection Agency, Headquarters, July 31–August 15, 2019*, October 9, 2019. The OPM required the EPA to perform actions based on 5 C.F.R. Part 250 and recommended that the Agency follow certain best practices related to workforce planning.

CHALLENGE: Enhancing Information Technology Security to Combat Cyberthreats

CHALLENGE FOR THE AGENCY

Cybersecurity requirements provide essential protections for EPA operations.

Protecting EPA networks and data is as important today as it was in 2001 when we first reported this issue as a management challenge. The EPA's Office of Mission Support is primarily responsible for IT management. Securing networks that connect to the internet is increasingly more challenging, with sophisticated attacks taking place that affect all interconnected parties, including federal networks. Federal agencies need to be vigilant in protecting their networks. Various federal agencies have had numerous attacks on their systems, impacting at least 21.5 million individuals. To reduce these risks for EPA information systems, the EPA needs to be vigilant in monitoring, establishing, and developing ways to mitigate long-range emerging threats.³⁹



The Federal Information Security Modernization Act of 2014 governs cybersecurity for federal government IT systems. The Act tasks each agency head with the responsibility for protecting agency information security systems and preventing the unauthorized access, use, disclosure, disruption, modification, or destruction of information. The five federal agencies with a role in ensuring enterprise cybersecurity and responding to cyber incidents are the Federal Bureau of Investigation, Federal Trade Commission, U.S. Department of Homeland Security, U.S. Secret Service, and the National Institute of Standards and Technology. These agencies play cross-cutting roles to support, monitor, or oversee the implementation of cybersecurity practices. The Department of Homeland Security has the primary day-to-day operational role in directing, assisting, and engaging with agencies to implement federal cybersecurity measures.

Since the Act's standards have been put in place, the OIG has reported that the EPA continues to face a challenge in implementing a vigorous cybersecurity program that strengthens its network defenses and data security in a time of ever-increasing threats to federal government networks. Cybersecurity is defined as the protection of internet-connected systems such as hardware, software, and data from cyberthreats. Individuals and enterprises practice cybersecurity to protect against unauthorized access to data centers and other computerized systems. The EPA has not fully implemented information security. The EPA must achieve a strong baseline protection for its network and must focus on how to manage evolving threats, increasing volumes of data, and remote access technologies.

³⁹ The GAO has designated information security as a governmentwide high-risk area since 1997. It expanded this high-risk area in 2003 to include protection of critical cyberinfrastructure and in 2015 to include protecting the privacy of personally identifiable information.

EPA Needs a Process for Overseeing Information Security Programs

Despite continued progress, the EPA has not fully implemented information security throughout the Agency. This area requires continued senior-level emphasis. The EPA relies heavily on program and regional offices and contractor personnel to implement and manage configurations and operations of Agency networked resources. The Agency needs oversight processes to monitor the performance of its information security program and contractors. To assist this oversight, the OIG continuously examines the EPA's use and control of operational resources.

Our audits have noted the need for improvements in many areas, including internal controls to ensure EPA offices comply with required security requirements to protect system data. We reported that the EPA needs to improve controls for implementing the Federal Insecticide, Fungicide, and Rodenticide Act and Pesticide Registration Improvement Act.⁴⁰ Specifically, the EPA needs to strengthen (1) automated controls for processing pesticide registration fees, (2) remediation of identified vulnerabilities that could compromise the systems, and (3) database security controls to remove unauthorized users of the system and install critical updates to the software to protect data.

Furthermore, our audits and GAO work continue to note that the EPA faces challenges in addressing outstanding weaknesses within its information security program and in managing contractors that provide key support in operating or managing Agency systems. In this regard, the EPA lacks controls to ensure that responsible parties remediate known security weaknesses by Agency deadlines and that these parties update the Agency's vulnerability management system so senior officials have an agencywide perspective on threats to the EPA's network. Additionally, EPA senior officials are not aware whether contractors with significant information security responsibilities are complying with federal training requirements. Also, the EPA does not have processes to determine which contractors require training and whether the training was completed.

THE AGENCY'S ACTIVITIES

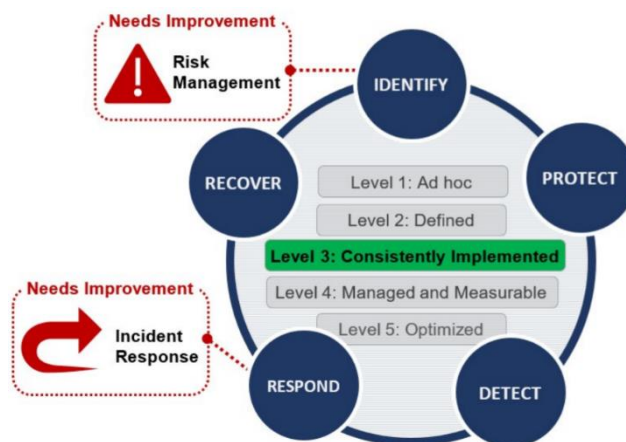
To address these complex cybersecurity issues, the EPA has made significant strides in developing a policy framework to enable IT systems to adhere to federal information security requirements. For example, the EPA has developed extensive policies and procedures, as well as addressed a significant portion of federal information security requirements and made them available to all headquarters and regional offices. However, the EPA manages the implementation of this policy framework in a decentralized manner. Our audit work also indicates that a lack of centralized oversight and reporting prevents the Agency from realizing a fully implemented information security program capable of effectively managing the remediation of known and emerging security threats.

In response to the FY 2019 management challenge report, the EPA indicated that the Agency is committed to protecting its information and technology assets. The EPA reiterated that it recognizes the prevalence and complexity of the ever-growing cybersecurity attacks and is aware of the impact on

⁴⁰ OIG, *Pesticide Registration Fee, Vulnerability Mitigation and Database Security Controls for EPA's FIFRA and PRIA Systems Need Improvement*, Report No. [19-P-0195](#), June 21, 2019.

the Agency's mission if information assets are compromised. The EPA stated that the Agency has established and implemented adequate processes for monitoring and managing contractor support actions to address concerns associated with this management challenge. The EPA has taken steps to address the OIG audit recommendations. However, actions are still needed to address cybersecurity challenges, as not all recommendations were resolved when we issued the March 2020 report, *EPA Needs to Improve Its Risk Management and Incident Response Information Security Functions*.⁴¹

The EPA needs to take additional steps to enhance cybersecurity. This includes consulting with respective critical infrastructure sector partners, as appropriate, to develop methods for determining the level and type of cybersecurity framework needed to protect entities within each critical infrastructure sector. The EPA needs to develop the corrective actions and milestones to complete the actions identified in the Office of Pesticide Programs' Pesticide Registration Improvement Act Maintenance Fee Risk Assessment document and associated plan regarding the fee payment and refund posting processes.



OIG assessment of the EPA's Federal Information Security Modernization Act function areas and domains. (EPA OIG graphic)

⁴¹ OIG, *EPA Needs to Improve Its Risk Management and Incident Response Information Security Functions*, Report No. [20-P-0120](#), March 24, 2020.

CHALLENGE: Communicating Risks to Allow the Public to Make Informed Decisions About Its Health and the Environment



CHALLENGE FOR THE AGENCY

EPA risk communication is a vital component of the EPA’s mission of protecting public health and the environment. The OIG has identified instances across water, air, land, and pesticide programs where the EPA needs more effective risk communication strategies to guide, coordinate, and evaluate its communication efforts to convey hazards. Environmental laws and regulations are designed to protect people from excess pollution, but when the EPA learns that people are at risk of exposure to harmful pollutants, it is essential that the risks are communicated to the public while they are being remediated. Without effective communication to the public about risk, the public may not know about risks or may not have high-quality information about how to protect themselves.



EPA authorized sign warning public of human health dangers. (EPA photo)

The EPA’s mission to protect human health and the environment includes work to ensure that “[a]ll parts of society--communities, individuals, businesses, and state, local and tribal governments--have access to accurate information sufficient to effectively participate in managing human health and environmental risks.” From FYs 2013 through 2020, the OIG has identified issues with the EPA’s actions to inform the public of environmental dangers. Citizens count on the EPA for timely and accurate risk communication messages—from risks of exposure to ethylene oxide, to unsafe drinking water in Flint, to farmers working near pesticides.

The EPA has not established strategic goals or objectives directly addressing risk communication. The success of the EPA’s goals depends on timely and effective risk communication with the public. Administrator Wheeler underscored risk communication as one of his top priorities in his July 2018 speech to EPA employees stating, “Risk communication goes to the heart of EPA’s mission of protecting public health and the environment. ... We must be able to speak with one voice and clearly explain to the American people the relevant environmental and health risks that they face, that their families face and that their children face.”

Communicating Water Pollution Risks

We have identified challenges that the EPA has in adequately communicating risks in surface and drinking water to the public. Our audit report on Flint highlighted issues with risk communication during a drinking water crisis. In April 2014, Flint's water system, which serves drinking water to a population of nearly 100,000 residents, switched from purchasing treated water from the Detroit Water and Sewerage Department (now called Great Lakes Water Authority) to sourcing and treating its own water supply from the Flint River. After Flint switched its drinking water supply, inadequate treatment exposed many of the residents to lead. Emergency authority was available to the EPA to take actions to protect the public from contamination. However, the EPA's communication weaknesses regarding health risks in Flint contributed to a delayed federal response to the water contamination.⁴²



Flint Water Plant tower. (OIG photo)

We have also reported that the EPA does not have complete and nationally consistent information on public drinking water systems' compliance with public notice requirement under the Safe Drinking Water Act. As a result, the EPA does not know whether public water systems appropriately notify consumers about drinking water problems and consumers do not know whether their drinking water complies with health-based standards.⁴³



Fish advisory sign. (EPA photo)

In addition, our audit and evaluation work has found that some subsistence fishers, including tribes, sport fishers, and other groups, consumed large amounts of contaminated fish without having access to adequate health warnings or fish advisories. Although most states and some tribes had fish advisories in place, this information was often confusing and complex, and it did not effectively reach the affected segments of the population. Although the EPA's risk communication guidance recommends evaluations of fish advisories, we found that fewer than half of states, and no tribes, have evaluated the effectiveness of their fish advisories. We recommended that the EPA take a stronger leadership role under the Clean Water Act by working with states and tribes to ensure that effective fish advisory information reaches all such segments of the population.⁴⁴

⁴² OIG, *Management Weaknesses Delayed Response to Flint Water Crisis*, Report No. [18-P-0221](#), July 19, 2018; OIG, *Management Alert: Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public*, Report No. [17-P-0004](#), October 20, 2016.

⁴³ OIG, *EPA Must Improve Oversight of Notice to the Public on Drinking Water Risks to Better Protect Human Health*, Report No. [19-P-0318](#), September 25, 2019.

⁴⁴ OIG, *EPA Needs to Provide Leadership and Better Guidance to Improve Fish Advisory Risk Communications*, Report No. [17-P-0174](#), April 12, 2017.

Furthermore, our work showed that, in the aftermath of Hurricane Harvey, the EPA's emergency response staff stationed in Houston handed out pamphlets, responded to telephone helpline calls, and informed non-English-speaking communities about issues related to disinfecting drinking water and septic systems. However, the regional staff did not provide all residents in Houston-area communities sufficient quantities of translated pamphlets, including those in Spanish.⁴⁵

Communicating Land Contamination Risks

The EPA faces challenges in communicating with residents about contaminated land. We found that the EPA's *Cleanups in My Community* website did not contain updated risk information for the Amphenol/Franklin Power Products site in Franklin, Indiana,⁴⁶ which means that residents who visited the website did not have current data about the risks in their communities.⁴⁷ We identified a case where bags of contaminated mine slag from the Anaconda Co. Smelter Superfund Site were being sold or provided as souvenirs; this use of slag had not been approved by the EPA or the Montana Department of Environmental Quality. Risk communication regarding the bags of slag was needed to protect human health.⁴⁸



EPA and Texas Commission on Environmental Quality command posts in Houston. (EPA photo)



Amphenol/Franklin Power Products site, Franklin, Indiana. (OIG photo)



Formation found at Anaconda Co. Smelter Superfund Site, Anaconda, Montana. (OIG photo)

We also determined that the EPA's risk communication regarding the unknown risks from the 352 identified pollutants in biosolids was not transparent on the EPA's website. The EPA's website, public documents, and biosolids labels did not explain the full spectrum of pollutants in biosolids and the

⁴⁵ OIG, *EPA Region 6 Quickly Assessed Water Infrastructure after Hurricane Harvey but Can Improve Emergency Outreach to Disadvantaged Communities*, Report No. [19-P-0236](#), July 16, 2019.

⁴⁶ EPA [website](#), *Cleanups in My Community*, last updated June 1, 2020.

⁴⁷ OIG, *Management Alert: Certain Risk Communication Information for Community Not Up to Date for Amphenol/Franklin Power Products Site in Franklin, Indiana*, Report No. [19-N-0217](#), June 27, 2019.

⁴⁸ OIG, *Management Alert: Unapproved Use of Slag at Anaconda Co. Smelter Superfund Site*, Report No. [20-N-0030](#), November 18, 2019.

uncertainty regarding their safety. Without data to complete risk assessments, the Agency cannot determine whether land-applied biosolids pollutants with incomplete risk assessments are safe.⁴⁹

The EPA's challenges in communicating risk to vulnerable communities extend to agricultural workers, as well. Over two million agricultural workers and pesticide handlers are protected by the Agricultural Worker Protection Standard requirements. The Worker Protection Standard is intended to reduce exposure to pesticides and provide enhanced protection to agricultural workers, pesticide handlers, and their families. We found that the state-led worker protection standard outreach to stakeholders, under a cooperative agreement with the EPA, was incomplete.⁵⁰



Tilling soil and injecting biosolids into a farm field near Madison, Wisconsin. OIG image and [video clip](#).

Communicating Air Pollution Risks

In a March 2020 management alert on ethylene oxide-emitting facilities, we identified shortfalls in the EPA's efforts to inform communities about these facilities. The EPA identified communities where exposure to ethylene oxide emissions from 25 "high-priority" chemical plants and commercial sterilizers could contribute to an elevated estimated lifetime cancer risk equal to or greater than 100 in one million, a risk level that the EPA generally considers not sufficiently protective of health. While the EPA or state personnel, or both, had met with residents living near nine of the 25 high-priority



Residential neighborhood in Houston with industrial facilities in the background. (OIG photo)

facilities, communities near 16 facilities had yet to be afforded public meetings or other direct outreach to learn about the health risks and actions being taken to address those risks.⁵¹

In a December 2019 report about the Agency's air monitoring response to Hurricane Harvey, we found that despite concerns about air quality and other issues in the Houston area after the hurricane, the EPA did not adequately communicate important information so that all impacted communities

⁴⁹ OIG, *EPA Unable to Assess the Impact of Hundreds of Unregulated Pollutants in Land-Applied Biosolids on Human Health and the Environment*, Report No. [19-P-0002](#), November 15, 2018.

⁵⁰ OIG, *EPA Needs to Evaluate the Impact of the Revised Agricultural Worker Protection Standard on Pesticide Exposure Incidents*, Report No. [18-P-0080](#), February 15, 2018.

⁵¹ OIG, *Management Alert: Prompt Action Needed to Inform Residents Living Near Ethylene Oxide-Emitting Facilities About Health Concerns and Actions to Address Those Concerns*, Report No. [20-N-0128](#), March 31, 2020.

received it. A lack of information hindered residents' ability to make informed and independent decisions to protect their health. Community liaisons and organizations expressed concerns about the lack of printed materials in languages other than English that are spoken in the Houston area.⁵²

THE AGENCY'S ACTIVITIES

This is the second year the OIG has identified risk communication as a management challenge, and the Agency has taken steps to improve its risk communication efforts:

- In November 2019, the Agency hired a senior risk communications advisor whose role is to develop and coordinate consistent risk communication activities across the Agency. The advisor will develop an Agency-level training program on risk communication for project managers, on-scene coordinators, and community involvement coordinators, who frequently communicate risk to the public.
- In September 2019, the Superfund program published risk communication guidance document, titled *Getting Risk Communication Right: Helping Communities Plan at Superfund Sites*. This guidance describes how the EPA is working to improve risk communication and community involvement practices during the post-construction, long-term stewardship phase of Superfund site remediation.
- The EPA's FYs 2018–2022 strategic plan discusses the importance of risk communication with respect to radiation and states that the Agency will focus on education—including formal and informal training—in the areas of health physics, radiation science, radiation risk communications, and emergency response to fill existing and emerging gaps.
- The EPA hosted a National Leadership Summit to focus on per- and polyfluoroalkyl substances in May 2018. The summit brought together state, tribal, and federal partners as well as key stakeholders, including industry, utilities, congressional staff, and nongovernmental organizations. The summit provided an opportunity to share information on ongoing efforts, identify specific near-term actions, and address risk communication challenges.

Despite increased awareness of the importance of risk communication strategies, EPA leadership needs to demonstrate an organizational commitment to correcting problems with such strategies, which are intended to protect human health and the environment. To demonstrate this commitment, the Agency should show that it has the proper resources and processes and has developed adequate risk communication strategies. The EPA cannot fully achieve its mission and fulfill the administrator's priority until it develops strategic goals, objectives, and management controls that explicitly address risk communication so that the public can take action to protect itself from hazards.

⁵² OIG, *EPA Needs to Improve Its Emergency Planning to Better Address Air Quality Concerns During Future Disasters*, Report No. [20-P-0062](#), December 16, 2019.

CHALLENGE: Fulfilling Mandated Reporting Requirements

CHALLENGE FOR THE AGENCY



Complying with mandatory reporting requirements is essential to providing accountability and information about EPA programs to Congress and the public. The EPA is responsible for submitting reports to Congress under several environmental statutes. Examples include the quadrennial report to Congress required under the Beaches Environmental Assessment and Coastal Health Act and the triennial report to Congress about the renewable fuel standards program required under the Energy Independence and Security Act of 2007. Mandated reports contain key program information for Congress, the administrator, and the public and can inform future rulemaking and decision-making.

However, the EPA did not issue multiple required congressional reports, as evident in specific OIG recommendations to fulfill legal reporting requirements. We first introduced this management challenge in 2018, after we found that the EPA had failed to submit mandated reports to Congress and the public in five environmental programs between 2010 and 2019. As stated in the GAO's *Standards for Internal Control in the Federal Government*, reliable reporting with respect to the agency's programs, objectives, and performance for both internal and external use is a fundamental component of internal control.

When the EPA does not fulfill requirements for statutorily mandated reports, it creates an internal control weakness and the Agency is in violation of the law that requires it to prepare and submit or publish that report. Not submitting required reports also leaves stakeholders uninformed about the Agency's progress towards achieving specific program goals, any challenges experienced during program implementation, and progress toward achieving broader environmental and public health goals.

The Agency has said that it did not fulfill these reporting mandates because it viewed them as not the best use of scarce resources, leading to specific recommendations from the OIG to fulfill legal reporting requirements.

THE AGENCY'S ACTIVITIES

Each year, the Agency prepares a list of mandated reports it views as outdated or duplicative as part of the budget process outlined in Office of Management and Budget Circular A-11, *Preparation, Submission, and Execution of the Budget*.⁵³ In the FY 2021 budget cycle, the EPA identified 13 reports it

⁵³ Office of Management and Budget Circular No. A-11, *Preparation, Submission, and Execution of the Budget*, December 2019.

considered outdated or duplicative, including the reports about the Beaches Environmental Assessment and Coastal Health Act and the conditional registration of pesticides required under Section 29 of the Federal Insecticide, Fungicide, and Rodenticide Act. The EPA informs congressional staff and committees about these “outdated” or “duplicative” reports, as well as its justification for classifying them as such. For the conditional registration of pesticides report, the EPA stated in its justification that the Agency eliminated that report and has not completed such a report in over 20 years. However, absent Congressional legislation to eliminate these reporting requirements, the EPA remains obligated to provide them.

CHALLENGE: Integrating and Leading Environmental Justice Across the Agency and Government

CHALLENGE FOR THE AGENCY

The EPA needs to enhance its consideration of environmental justice across programs and regions and provide leadership in this area for the federal government.

Across the country, communities of low-income and people of color live adjacent to heavily polluted industries or “hot spots” of chemical pollution. For example, studies show that 70 percent of hazardous waste sites officially listed on the National Priorities List under Superfund are located within one mile of federally assisted housing.⁵⁴ These communities bear a disproportionate burden of environmental hazards. In 1994, President Bill Clinton signed Executive Order 12898 requiring federal agencies 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.

On June 30, 2020, Administrator Wheeler reaffirmed the EPA’s commitment to environmental justice, stating that the “EPA works day in and day out to provide clean air, water and land, with a particular focus on environmental justice.”⁵⁵

The EPA defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Integration of environmental justice principles into all EPA programs and across all regions is necessary to promote environmental justice and to achieve environmental equity across all communities.

Over the past ten years, the OIG and the GAO have consistently found that the EPA needs to improve its execution of environmental laws and regulations in communities that are disproportionately impacted by negative environmental factors. Environmental justice implementation and oversight remain a significant management challenge for the Agency’s ability to adequately protect human health.

To effectively integrate environmental justice across EPA programs, the Agency should focus on strengthening its federal leadership role; continuing to build and employ an environmental justice strategic plan, measures, and grant outreach programs; ensuring the development and



⁵⁴ Shriver Center on Poverty Law and Earthjustice, [*Poisonous Homes: The Fight for Environmental Justice in Federally Assisted Housing*](#), June 2020.

⁵⁵ EPA, “Two Philadelphia Organizations Receive Funding to Support Environmental Justice Projects,” [News Release](#), June 30, 2020.

implementation of a comprehensive, nationwide plan; and considering the impact of all activities on environmental justice communities in actions revoked and taken by the Agency as a whole.

EPA Serves in Federal Leadership Role

The EPA is the chair of the Interagency Working Group on Environmental Justice, established by Executive Order 12898 to coordinate federal environmental justice efforts. In this role, the Agency has both the opportunity and the responsibility to lead other federal government entities in their efforts to fully implement environmental justice requirements.

In 2019, the GAO found that the EPA should strengthen its leadership role in the Interagency Working Group on Environmental Justice. The GAO reported that, while many federal agencies did not establish plans, measures, or consistent reports on their environmental justice activities, the EPA has developed and maintained environmental justice strategic plans, established performance measures to track progress in implementing those plans, and reported progress toward achieving the measures.⁵⁶

However, the GAO recommended that the EPA develop or help develop guidance for other federal agencies on what to include in environmental justice strategic plans and how to assess progress toward environmental justice goals. It also recommended that the EPA establish strategic goals for the federal government's environmental justice efforts in its own organizational documents and update a memorandum of understanding to renew other federal agencies' commitments to the Interagency Working Group. The EPA agreed to all the recommendations, except for establishing strategic goals for the federal government in its own organizational documents. The EPA countered that these goals could be established through other actions.

The EPA's strategic plan for environmental justice, called the EJ 2020 Action Agenda, provides plans and performance measures for attaining its goals and objectives. However, the strategic plan does not always provide specific goals for its measures. For example, one of the measures in the EJ 2020 Action Agenda states that the "EPA will offer [environmental justice] training to all state and local agencies that are delegated/authorized to implement federal environmental laws," but it does not provide details on how many trainings will be conducted.⁵⁷ Further, the EPA's environmental justice annual progress reports do not clearly convey the performance measures indicated in the strategic plan, making it difficult to measure progress over time. The EPA is identified as the leader in environmental justice across the government, but there are several critical ways it can improve its leadership and set an example among its peers.

Strategic Plan, Measures, and Grant Outreach

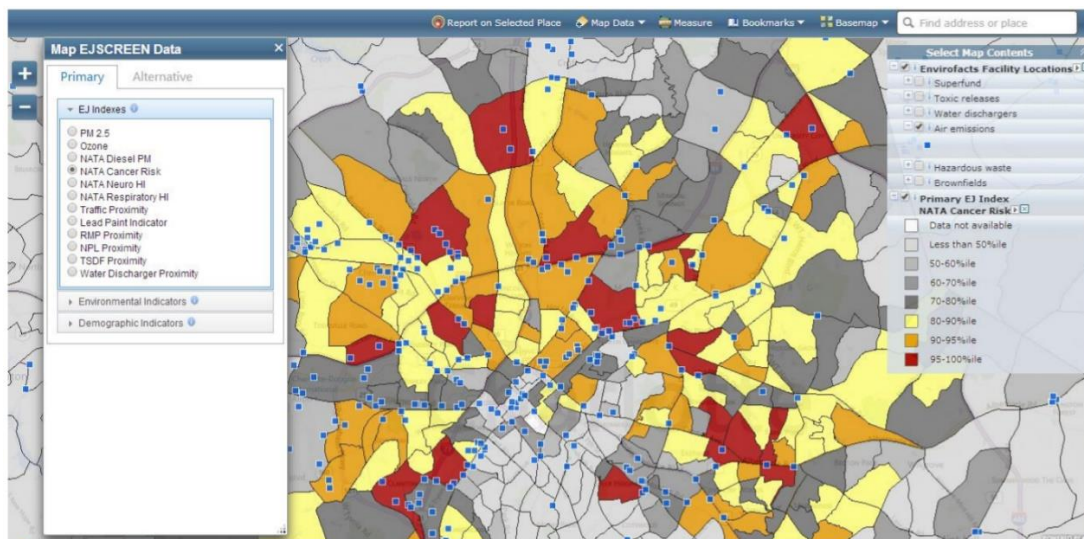
The EPA created the Office of Environmental Equity within the Office of the Administrator in 1992 to help integrate environmental justice into the EPA's work, cultivate strong partnerships to improve on-

⁵⁶ GAO, *Environmental Justice: Federal Efforts Need Better Planning, Coordination, and Methods to Assess Progress*, [GAO-19-543](#), September 16, 2019.

⁵⁷ EPA, *EJ 2020 Action Agenda: The U.S. EPA's Environmental Justice Strategic Plan for 2016–2020*, October 2016.

the-ground results, and chart a path forward to achieve better environmental outcomes and reduce disparities in the nation's most overburdened communities. This office was subsequently renamed the Office of Environmental Justice and, as of 2017, is housed in the EPA's Office of Policy within the Office of the Administrator. The Office of Environmental Justice provides financial and technical assistance to communities working constructively and collaboratively to address environmental justice issues. It also works with local, state, and federal governments; tribal governments; community organizations; business and industry; and academia to establish partnerships designed to protect all people from environmental and health hazards, regardless of race, color, national origin, or income.

To accomplish its mission, the Office of Environmental Justice creates programs, policies, and activities to assist communities in building their capacity to address environmental justice issues. These include helping communities to engage federal agencies, so that the agencies understand environmental justice issues and incorporate the communities' views into agency decisions, as well as providing tools and resources to promote the principles of environmental justice. EPA Regions and the Office of Enforcement and Compliance Assurance use several tools to identify which large facilities should be inspected for air toxics, including EJSCREEN, which is an online mapping and analysis tool developed by the Office of Environmental Justice to help integrate environmental justice into the Agency's work.⁵⁸



Source: EJSCREEN v. 2.0 analysis conducted by the OIG.

Lack of Integration Across Programs and Regions

Despite being a federal leader in establishing plans and measures and in reporting on its environmental justice efforts, the EPA has additional progress to make in integrating environmental justice concerns across all programs and Regions. The Office of Environmental Justice is not alone in addressing environmental justice in the Agency. The EPA's environmental justice mandate extends to Agency work across all program and regional offices, including:

⁵⁸ EPA, *EPA Regions Have Considered Environmental Justice When Targeting Facilities for Air Toxics Inspections*, Report No. [15-P-0101](#), February 26, 2015.

- Setting standards and regulations.
- Facility permitting decisions.
- Grant awards.
- Reviews of proposed federal agency actions.
- Enforcement decisions.

Working to address environmental justice is also a key component of the “Overseeing States, Territories, and Tribes Responsible for Implementing EPA Programs” management challenge. Partnerships are an integral piece of the Agency’s environmental justice program, particularly the efforts of state, tribal, and local governments to advance environmental justice. Environmental justice is also a key component of the FY 2020 management challenge “Maintaining Operations During Pandemic and Natural Disaster Responses.” For example, data from the Centers for Disease Control and Prevention show that the COVID-19 disease has disproportionately impacted African American mortality in many states.

OIG reports show that, with respect to environmental justice, gaps exist in almost all of the EPA’s activities, such as managing air quality, drinking water, toxic releases to surface waters, Superfund sites, emergency response, and environmental education. These reports point to a systemic problem with the Agency’s ability to address environmental justice across all program offices. For the EPA to effectively address environmental justice challenges nationwide, the Agency will need to develop comprehensive environmental justice performance measures for all policies and programs.

In September 2015, we examined the content and implementation of the Agency’s *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*, dated May 2015, and identified deficiencies.⁵⁹ Given that regulations carry the force and effect of law, they can have substantial implications for policy implementation. Because of this, environmental justice should be a key consideration in devising and promulgating regulations. Our 2015 report found that adherence to the guidance was inconsistent and voluntary. In addition, we found that the guidance lacked measures and controls to assess when and how it is used in rulemaking, limiting the EPA’s ability to encourage broad, consistent use throughout the Agency and to evaluate the guidance’s impact on rulemaking.

Our work has indicated that the EPA continues to struggle with integrating environmental justice across all programs and Regions. This struggle is particularly evident in the EPA’s emergency response efforts and in its oversight of delegated state programs. Several OIG reports have found that EPA regions struggle with incorporating and considering environmental justice communities when identifying and communicating risk. For example, in July 2018, we found that the residents of Flint were exposed to lead in drinking water due to a delayed and inadequate federal response that failed to identify drinking water risks.⁶⁰ We recommended that the EPA implement a system to identify management risks in state drinking water programs that includes environmental justice concerns, among other elements.

⁵⁹ OIG, *EPA Can Increase Impact of Environmental Justice on Agency Rulemaking by Meeting Commitments and Measuring Adherence to Guidance*, Report No. [15-P-0274](#), September 3, 2015.

⁶⁰ OIG, *Management Weaknesses Delayed Response to Flint Water Crisis*, Report No. [18-P-0221](#), July 19, 2018.

We also issued two reports following Hurricane Harvey that demonstrated weaknesses in Region 6's ability to properly inform environmental justice communities of air, floodwater, and drinking water risks.⁶¹ We found that health risks to fenceline communities from emission spikes related to Hurricane Harvey were unknown and that public communication of air monitoring results after Hurricane Harvey was limited. As a result, communities—particularly fenceline and environmental justice communities—were unaware of the health risks and data results related to multiple facility startups and shutdowns before, during, and after the hurricane. We recommended that the EPA develop and implement a plan to inform residents in fenceline and nearby communities about adverse health risks resulting from these activities and to limit their exposure to air toxics. We also recommended environmental justice training be conducted for staff who interact with the community, as well as for those who lead the response efforts.

We found similar limitations with respect to the risks of floodwater and drinking water after Hurricane Harvey. Some affected communities did not receive some storm-related human health and environmental information, or some of this information was not presented in relevant languages, or both. This could have resulted in citizens lacking essential public safety information. We found that improved outreach to these communities could improve the public health of communities impacted by hurricanes and other disasters and enhance Region 6's emergency response capabilities. We recommended that Region 6 personnel gather data on the population and unique challenges of vulnerable communities, revise the pre-landfall hurricane plan to incorporate environmental justice outreach, and provide outreach materials in all prevalent languages.

The OIG continues to assess the Agency's environmental justice activities across programs and Regions. Three in-progress OIG projects will contribute to this work:

- Our civil rights work will address whether the EPA's External Civil Rights Compliance Office has implemented an oversight system to provide reasonable assurance that organizations receiving EPA funds comply with Title VI requirements, which prohibit discrimination on the basis of race, color, or national origin. This work will also address Title VI compliance for all EPA



[Video](#) illustrating air toxic releases in geographic areas and monitor methods used over time. (OIG video)



An aerial view of the flooding caused by Hurricane Harvey in Houston on August 31, 2017. (U.S. Department of Defense photo)

⁶¹ OIG, *EPA Region 6 Quickly Assessed Water Infrastructure after Hurricane Harvey but Can Improve Emergency Outreach to Disadvantaged Communities*, Report No. [19-P-0236](#), July 16, 2019; OIG, *EPA Needs to Improve Its Emergency Planning to Better Address Air Quality Concerns During Future Disasters*, Report No. [20-P-0062](#), December 16, 2019.

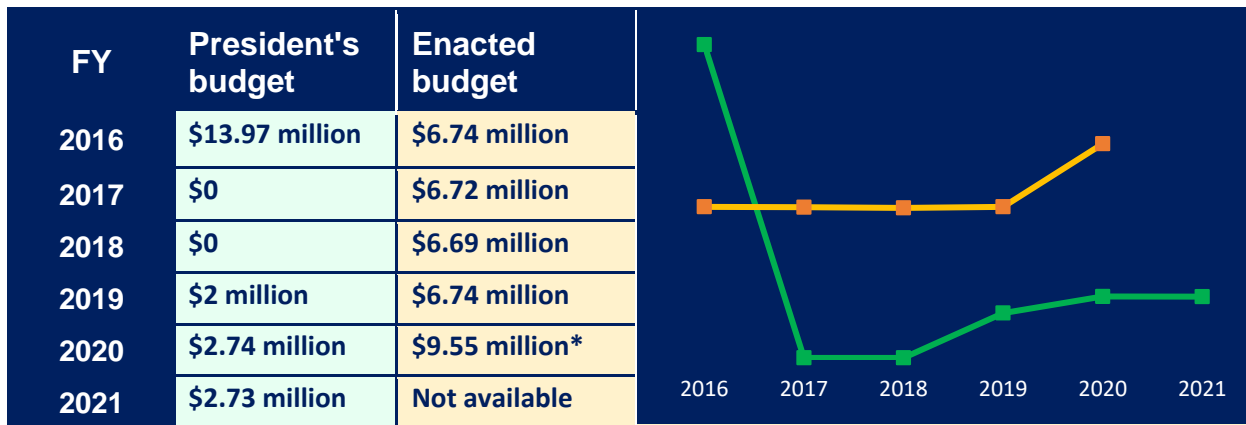
environmental programs, as requested by 22 U.S. senators in a November 22, 2019 congressional request.⁶²

- As part of our ongoing work on the EPA's risk communication efforts, we held listening sessions for community members near the USS Lead Superfund site in East Chicago, Indiana; the Coakley Landfill Superfund site in North Hampton, New Hampshire; and the Amphenol Superfund site in Franklin, Indiana. About 70 percent of the more than 1,300 Superfund sites across the country are within one mile of public housing.⁶³
- We are also evaluating the EPA's oversight of public water systems in Indian Country, including how the Agency is providing safe drinking water to customers during the coronavirus pandemic.⁶⁴

THE AGENCY'S ACTIVITIES

The EPA has taken several actions over the past couple of years that threaten to reverse course on its prior environmental justice efforts. Since 2017, the EPA's budget requests for its environmental justice efforts have been significantly reduced from the \$13.97 million requested in FY 2016 (Table 2). Congress rejected the EPA's requests to defund the program and continued to provide funding to this effort.

Table 2: Environmental justice budgets



Source: OIG analysis and image.

*Reflects estimated enacted budget.

⁶² OIG Notification Memorandum, *Effectiveness of EPA's External Civil Rights Compliance Office in Determining Title VI Compliance in Organizations Receiving EPA Funding (2nd notification)*, Project No. [OA&E-FY19-0357](#), February 13, 2020.

⁶³ OIG Notification Memorandum, *Communication of Human Health Risks Posed by Sites in the Office of Land and Emergency Management's Programs (2nd notification)*, Project No. [OA&E-FY19-0031](#), February 4, 2019.

⁶⁴ OIG Notification Memorandum, *EPA's Oversight of Tribal Drinking Water Systems*, Project No. [OA&E-FY20-0044](#), May 29, 2020.

As demonstrated in Table 2, the EPA requested \$2.73 million in environmental justice funding in the FY 2021 President’s Budget, a \$6.82 million reduction compared to the \$9.55 million provided in the FY 2020 Enacted Budget. According to the FY 2021 Justification of Appropriation, the reduction:

[R]eflects a focus on providing financial assistance grants to community-based organizations and technical assistance to low income, minority, and tribal/indigenous populations. This change proposes to eliminate support for the EJ hotline, engagements with vulnerable and overburdened communities, and EJ trainings.

A former EPA assistant associate administrator for environmental justice warned that budget cuts to EPA’s flagship environmental programs “will increase the public health impacts and decrease the economic opportunities” in communities disproportionately affected by pollution and other environmental harms.

According to the EPA’s website, “Environmental justice will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”⁶⁵ EPA leadership needs to reaffirm its commitment to Executive Order 12898 by ensuring that environmental justice is integrated into every program and regional office across the Agency. The EPA can make progress toward implementing this Executive Order by proposing budgets that can obtain adequate resources for its environmental justice and civil rights efforts, consistently integrating these principles into all Agency activities, and providing leadership in its role as chair of the Interagency Working Group on Environmental Justice.

⁶⁵ EPA [website](#), *Learn about Environmental Justice*, last updated on November 7, 2018.