U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

EPA's Fiscal Year 2012 Management Challenges

Statement of Arthur A. Elkins Jr.
Inspector General

Before the Subcommittee on Oversight
Committee on Science, Space, and Technology
U.S. House of Representatives

March 14, 2013

Statement of
Arthur A. Elkins Jr.
Inspector General
Office of Inspector General
U.S. Environmental Protection Agency
Before the
Subcommittee on Oversight
Committee on Science, Space, and Technology
U.S. House of Representatives
March 14, 2013

Good morning Chairman Broun, Ranking Member Maffei and Members of the Subcommittee. I am Arthur Elkins, Inspector General of the U.S. Environmental Protection Agency. I am pleased to appear before you today to discuss the significant management challenges facing the EPA that the Office of Inspector General identified for fiscal year 2012. Thank you for allowing me the opportunity to share with you our work and recommendations on how to improve EPA's programs and operations. Before I begin, I would like to commend the expertise, dedication and professionalism of the OIG staff whose exceptional work serves as the foundation of my testimony this afternoon. I also would like to mention that last year the OIG was a recipient of the Alexander Hamilton Award for its work related to the Deepwater Horizon oil spill. This is the highest award bestowed by the inspector general community, and highlights achievements in improving the integrity, efficiency and effectiveness of Executive Branch agency operations.

Role of the OIG

The OIG is an independent and non-partisan office within the EPA that is uniquely positioned to conduct audits and investigations of waste, fraud and abuse of agency programs and operations. Although we are a part of the EPA, senior EPA leaders can neither prevent nor prohibit us from conducting our work. In accordance with the Inspector General Act of 1978, as amended, the OIG's mission is to: conduct independent and objective audits, investigations and inspections; prevent and detect waste, fraud and abuse; promote economy, effectiveness and efficiency; review pending legislation and regulation; and keep the agency head and Congress fully and currently informed.

EPA Management Challenges for FY 2012

Today I will briefly summarize our July 2012 report on EPA's management challenges for FY 2012 that we provided to both the Administrator and Congress as mandated by the Reports Consolidation Act of 2000. This report, which was included in the Agency's Financial Report, is available to the public in its entirety on the OIG's web site.

To prepare this report, we defined management challenges as program or management functions, within or across the agency, that have greater vulnerability to waste, fraud,

abuse and mismanagement where a failure to perform well could seriously affect the ability of EPA to achieve its mission or goals.

The following are the five areas we determined were the key management challenges facing the EPA for FY 2012:

- Oversight of Delegations to States
- Safe Reuse of Contaminated Sites
- Limited Capability to Respond to Cyber Security Attacks
- EPA's Framework for Assessing and Managing Chemical Risks
- Workforce Planning

We deleted one management challenge that we had identified the previous year (Need for Greater Coordination of Environmental Efforts) because we recognize that cross-agency coordination is not something over which EPA has exclusive control. The OIG acknowledges the agency's efforts to coordinate environmental issues across the federal government and with state and local partners.

We are currently in the process of identifying the most serious management challenges for FY 2013 and will issue our list to the EPA Administrator later this year. Following are details on the key management challenges we had identified for FY 2012.

OVERSIGHT OF DELEGATIONS TO STATES

To accomplish its mission to protect human health and the environment, EPA develops regulations and establishes programs to implement environmental laws. The agency may authorize state, local or tribal governments to implement many of these laws when they request authorization and EPA determines that governments are capable of operating the program consistent with federal standards. The agency relies heavily on authorized state and tribal agencies to implement environmental programs and the performance of state and tribal governments is critical to assuring protection of human health and the environment. However, EPA delegation does not exempt EPA from its statutory and trust responsibilities to protect human health and the environment.

EPA performs oversight of state, local and tribal programs to provide reasonable assurance that delegated programs are achieving their goals. Since 2008, we have designated oversight of delegations to states as a management challenge. The agency has begun to improve its oversight by implementing the State Review Framework, which is intended to provide a consistent approach for overseeing state programs and identifying weaknesses and areas for improvement. However, this challenge persists. For example:

- In December 2011, we reported that despite EPA efforts to improve state enforcement performance, state enforcement programs frequently do not meet national goals and states do not always take necessary enforcement actions. EPA data show that noncompliance is high and the level of environmental enforcement is low. Our report identifies various reasons for this, such as limited state

resources, the management of enforcement resources, and the use of oversight authority. States and EPA are accountable for meeting enforcement standards and effectively curtailing weak and inconsistent enforcement. If these issues are not addressed, state performance will remain inconsistent across the country, providing unequal environmental benefits to the public and an unlevel playing field for regulated industries.

- In June 2011, we reported that Georgia's Concentrated Animal Feeding Operations program was operating without proper permits, inspection reports were missing required components, and the state was not assessing compliance with permits. EPA records presented a misleading picture of the status of the state's program. Georgia and EPA's records reported a 100 percent inspection rate for CAFOs, but almost half of these inspection reports were missing information. As a result of inadequate oversight and reporting, Georgia's waters were vulnerable to discharges of animal waste from CAFOs, which are associated with a range of human health and ecological impacts and contribute to degradation of the nation's surface waters.

We continue to conduct work in this area to provide recommendations to ensure that the agency provides stronger and effective oversight of delegations to states.

SAFE REUSE OF CONTAMINATED SITES

The EPA has placed increasing emphasis on the reuse of contaminated properties and has a performance measure to define a population of contaminated sites that are ready for reuse. The agency has successfully turned some problem sites into properties that reinvigorated communities and created jobs. However, EPA's primary duty is to ensure that contaminated sites are safe for humans and the environment. The agency faces significant and increasing challenges in this area due to: 1) the common practice of not removing all sources of contamination from hazardous sites; 2) a regulatory structure that places key responsibilities for monitoring and enforcing the long-term safety of contaminated sites on non-EPA parties that may lack necessary resources, information and skill; 3) changes in site risks as site conditions change over time; and 4) weaknesses in EPA's oversight of the long-term safety of sites. In addition, the agency has noted in its 2011 – 2015 Strategic Plan that it must incorporate emerging science into decision making.

Since 2009, we have designated safe reuse of contaminated sites as an EPA management challenge. The lack of effective long-term monitoring and enforcement of reuse controls at contaminated sites can pose significant risks to human health and the environment. Our recent work highlights the potential risks involved. For example:

- In August 2011, we reported the results of a review of conditions at five Superfund sites that had been remediated and removed from EPA's list of national Superfund priorities. At two of the sites we reviewed, we found new contamination and changed site conditions. At one former industrial site, we

found that the site owner was building a residence on top of the site although levels of contamination detected at the site exceeded residential safety levels and the site contained buried drums and other potential human health hazards.

- In February 2011, we reported that the EPA relies on the self-certification of a third-party environmental professional to determine whether statutorily required environmental due diligence has been performed at EPA-funded Brownfields sites. In a sample of environmental due diligence investigations we reviewed, environmental professionals failed to assure that a proper environmental investigation occurred. In addition, we found that the EPA conducts no oversight of the requirement to meet "continuing obligations" at EPA-funded Brownfields properties. Continuing obligations include land use controls and "institutional" controls designed to prevent unacceptable use of contaminated properties. Weaknesses or lapses in meeting environmental due diligence or continuing obligations requirements can result in undetected or undisclosed contamination and property reuse that may pose unacceptable risk to humans.

- In February 2012, we reported on important improvements in EPA's review and oversight of Superfund Five-Year Reviews. The Superfund FYR process is and should be a "safety net" for detecting new contamination or changes in conditions at sites determined to have met cleanup goals. FYRs can identify new potential human health risks and changing site conditions. We found that the FYR process needs to be a stronger safety net. We also found no formal process in place to resolve differences when EPA headquarters and regions disagree on the conclusions of FYR reports. Consequently, protectiveness determinations included in published FYR reports may reflect unresolved agency disagreements about site protectiveness. In addition, our review showed that the EPA did not always follow up to determine whether the regions implemented recommendations made in FYRs, and regions sometimes disregarded valid EPA headquarters comments about the quality of FYRs.

We have ongoing work in this area that will provide recommendations to EPA on how it can provide stronger and effective controls to ensure the long-term safety of reused sites.

LIMITED CAPABILITY TO RESPOND TO CYBER SECURITY ATTACKS

As technology continues to advance and the agency increases its use of automated systems to further integrate EPA data and services with external users via the Internet, having a strong information technology infrastructure that addresses security at the enterprise architecture level is critical to protecting the agency against cyber attacks. The growth in computer connectivity places the EPA at increased risk of disruption to its critical operations as well as the possibility of unauthorized access to sensitive data. As such, it is imperative that EPA management continues efforts to strengthen practices to guard against Advanced Persistent Threats.

The EPA acknowledges that Advanced Persistent Threats pose a significant challenge for the agency and has committed to making significant progress in enhancing situational awareness across the infrastructure and increasing visibility into network activities. EPA management stated that to address this challenge, it has identified specific automated tools to deal with cyber security concerns. Agency management also indicated it fully deployed a Security Information and Event Management tool to facilitate greater vigilance in log reviews and activity monitoring. Additionally, the agency indicated that its Computer Security Incident Response Capability team is working to build stronger relationships with internal organizations, such as the Office of Homeland Security, for threat intelligence sharing. However, this challenge persists. For example:

- In June 2011, we reported that the EPA has taken steps to address cyber threats, but key actions remain incomplete. In particular, we found limited assurance that data in the Automated System Security Evaluation and Remediation Tracking tool are reliable for decision-making. This tool is used to track the remediation of weaknesses in EPA's information security program, as well as inform management about the adequacy of controls implemented to protect agency systems. In addition, we concluded that the Computer Security Incident Response Capability center lacks the skills and resources to promptly identify and effectively remedy ongoing cyber threats. Furthermore, the EPA had not established an agency wide continuous network security monitoring program to identify known vulnerabilities. In this regard, the EPA has not completed a key project that would provide its offices with the needed tools to implement an agency wide approach for identifying known vulnerabilities. As a result, the EPA continues to lack information necessary to make accurate information system security investment decisions, effectively monitor its network for suspicious activity or remediate known weaknesses on its network.

- In September 2012, we reported that the EPA needed to make improvements in its network security monitoring program. We reported that EPA neither developed a comprehensive deployment strategy for its Security Information and Event Management tool to incorporate all of the agency's offices nor developed a formal training program to train employees on how to use the tool. This computerized tool is used to centralize the storage and review of computer logs or events to monitor or investigate unusual network activity. Furthermore, the EPA does not have a computer security log management policy to define practices for audit log storage and disposal, to include defined roles and responsibilities for log management. The agency also did not follow up with staff to confirm whether they took corrective actions to remediate known system vulnerabilities or steps to address weaknesses in its incident response program that were identified from internal reviews. As a result, EPA invested in a network monitoring tool that limited the agency's assurance of meeting organizational goals and user needs, increased risks that the EPA could not effectively respond to network compromises because data necessary to provide insight on suspicious activity would not be available when needed, and continued existence of known system

vulnerabilities and programmatic weaknesses that undermine the agency's ability to secure its network and respond to network intrusions.

We have ongoing work in this area and will provide EPA with recommendations when warranted for providing stronger and effective controls to secure its network infrastructure and respond to cyber attacks.

EPA'S FRAMEWORK FOR ASSESSING AND MANAGING CHEMICAL RISKS

The EPA's framework for assessing and managing chemical risks has not yet achieved the goal of protecting human health and the environment. In 1976, Congress passed the Toxic Substances Control Act authorizing EPA to collect information on chemicals, and regulate the production and distribution of those chemicals. The agency's effectiveness in assessing and managing chemical risks is hampered by limitations on its authority to regulate chemicals under TSCA.

Since 2010, we have designated the EPA's framework for assessing and managing chemical risks as a management challenge. It is a significant challenge as the TSCA inventory of chemicals in commerce now exceeds 84,000 chemicals, and there are other challenges. Specifically, chemicals that were produced for commercial purposes prior to TSCA were grandfathered, so manufacturers were not required to develop and produce data on toxicity and exposure that would be needed to properly and fully assess potential risks. Further, TSCA never provided adequate authority for the agency to evaluate existing chemicals as new concerns arose or as new scientific information became available. TSCA also lacks the broad information-gathering and enforcement provisions found in other major environmental protection statutes. For example, TSCA does not provide the EPA with the administrative authority to seek injunctive relief, issue administrative orders, collect samples, and quarantine and release chemical stocks, among other key authorities.

In 2009, the Administration outlined core principles to strengthen U.S. chemical management laws. Congress has also made attempts to revise and modernize TSCA. However, in the absence of new legislation, we reported in 2010 that the EPA could better manage existing authorities and demonstrate results within its New Chemicals Program and Endocrine Disruption Screening Program. For example, the EPA does not have integrated procedures and measures to ensure that new commercial chemicals do not pose an unreasonable risk to human health and the environment. Oversight of regulatory actions designed to reduce known risks is a low priority, and the resources allocated by the agency are not commensurate with the scope of monitoring and oversight work. In addition, the EPA's procedures for handling confidential business information requests are predisposed to protect industry information rather than provide public access to health and safety studies. Finally, the agency's framework for assessing and managing chemical risks from endocrine disruptors is failing to show results. Despite establishing the Endocrine Disruption Screening Program in 1998, the EPA has yet to regulate the endocrine-disrupting effects of any chemicals.

Other work we conducted in support of this management challenge includes:

- In December 2011, we reported that the EPA does not currently have sufficient information or processes to effectively manage human health and environmental risks from nanomaterials. Though the agency has the statutory authority to regulate nanomaterials, it lacks the environmental and human health exposure and toxicological data to do so effectively. The EPA has proposed mandatory reporting rules for nanomaterials under the Federal Insecticide, Fungicide, and Rodenticide Act and is also developing proposed rules under TSCA. After the OIG reported that the EPA lacked a formal process to coordinate the dissemination and utilization of the potentially mandated information, the agency agreed to our recommendation to establish a process.

- In July 2011, we reported that the EPA's Voluntary Children's Chemical Evaluation Pilot Program did not achieve its goals to design a process to assess and report on the safety of chemicals to children. The pilot's design did not allow for desired outcomes to be produced. Specifically, the pilot had a flawed chemical selection process and lacked an effective communication strategy. Program effectiveness was hampered by industry partners who chose not to voluntarily collect and submit information, and the agency's decision not to exercise its regulatory authorities under TSCA to compel data collection. We concluded that the EPA has not demonstrated that it can achieve children's health goals with a voluntary program.

We will continue to monitor the agency's progress in assessing and managing chemical risks.

WORKFORCE PLANNING

Over the last 5 years, the EPA has averaged over 17,000 positions in its organizational structure with annual payroll costs of approximately $2 billion. For any organization to operate efficiently and effectively, it must have a clear understanding of its workload. While there is no one exact definition of workload, it is commonly thought to be the amount of work assigned to, or expected to be completed by, a worker in a specified time period. Workload that is set too high or too low can negatively affect overall performance. The main objectives of assessing and predicting workload are to achieve an evenly distributed, manageable workload and to accurately determine the resource levels needed to carry out the work. The OIG has recently issued several reports examining how the EPA manages its workload and workforce levels. For example:

- In December 2010, we found that EPA's policies and procedures do not include a process for determining resource levels based on workload as prescribed by the Office of Management and Budget. Further, the EPA does not determine the number of positions needed per mission-critical occupation using workforce analysis as required by the Office of Personnel Management. These conditions occurred because the agency has not developed a workload assessment

methodology and has not developed policies and procedures that require workload analysis as part of the budget formulation process. As a result, the EPA cannot demonstrate that it has the right number of resources to accomplish its mission.

- In September 2011, we found that the agency has not collected comprehensive workload data or conducted workload analyses across the EPA in about 20 years. The EPA does not require program offices to collect and maintain workload data, and the programs do not have databases or cost accounting systems in place to collect data on time spent on specific mission-related outputs. Office of Management and Budget guidance states that agencies should identify their workloads to help determine the proper workforce size, and federal accounting standards require that agencies establish cost accounting systems to allow them to determine resources consumed for work performed. Without sufficient workload data, program offices are limited in their ability to analyze their workloads and accurately estimate resource needs, and EPA's Office of Budget must base budget decisions primarily on subjective justifications at a time when budgets continue to tighten and data-driven decisions are needed.

We made several recommendations to address these findings, including that the agency: conduct a pilot project requiring EPA offices to collect and analyze workload data on key project activities; based upon those pilot results, develop guidance for agency program managers for conducting workload analysis; and complete a workload analysis for all critical functions to support its budget request.

While the EPA has and continues to take action to address the longstanding issue of workforce analysis, much work remains to develop practical methods that the agency can use to accurately estimate workload and staffing levels.

Conclusion

While the EPA's senior leadership is taking the management challenges seriously and is making progress in resolving them, the agency must remain focused on these challenges, especially in light of the difficult budgetary climate facing all federal agencies today. The OIG will continue to provide oversight and track the EPA's actions on these challenges while looking to identify any emerging issues warranting attention. In conclusion, I would like to reaffirm the OIG's commitment to vigorously work with the Administrator and Congress to ensure that the agency's programs and operations work efficiently and effectively for the benefit of the American taxpayer.

Mr. Chairman, this concludes my prepared statement. I will be pleased to answer any questions you or the Members may have.