

# EPA's FY 2008 Performance and Accountability Report

# Section IV Other Accompanying Information

This document is one chapter from the *Fiscal Year 2008 Performance and Accountability Report*, U.S. Environmental Protection Agency (EPA-190-R-08-004), published on November 17, 2008. This document is available at: <a href="www.epa.gov/ocfo/par/2008par/index.htm">www.epa.gov/ocfo/par/2008par/index.htm</a>. Printed copies of EPA's *FY 2008 Performance and Accountability Report* are available from EPA's National Service Center for Environmental Publications at 1-800-490-9198 or by e-mail at <a href="mail@one.net">ncepimal@one.net</a>.

# MANAGEMENT CHALLENGES AND INTEGRITY WEAKNESSES

Management challenges and integrity weaknesses represent vulnerabilities in program operations that may impair EPA's ability to achieve its mission and threaten the Agency's safeguards against fraud, waste, abuse, and mismanagement. These areas are identified through internal Agency reviews and independent reviews by EPA's external examiners, including the Office of Management and Budget (OMB), the Government Accountability Office (GAO), and EPA's Office of Inspector General (OIG). EPA's senior managers are committed to correcting vulnerabilities in programmatic and financial operations and maintaining effective and efficient internal controls to ensure that program activities are carried out in accordance with applicable laws and sound management policy. EPA leaders meet periodically to discuss issues raised by the Office of Inspector General and other evaluators, to review the Agency's progress in addressing current weaknesses, and to identify emerging issues or concerns.

This section has two components: 1) a summary of EPA's progress in addressing current integrity weaknesses and 2) the top management challenges identified by the Office of Inspector General and reported to EPA's Administrator in the Office of Inspector General's July 2, 2008, memorandum, EPA's Key Management Challenges for Fiscal Year 2008, and the Agency's response.

# **EPA's Progress in Addressing FY 2008 Weaknesses**

#### **Material Weaknesses**

#### Physical Security of Critical Assets

During its audit of the Agency's FY 2007 financial statements, the Office of Inspector General found that physical security and environmental controls at the Agency's Cincinnati Finance Center needed to be improved, and previously identified weaknesses needed management's attention. To remedy this deficiency, controls over visitor and general access to the server room were established and physical security enhanced with improved technology. A new camera was installed in the existing server room, which includes a 24-hour video recording system, and a card reader system was installed to monitor and log entry events. The current server room was enhanced to include sensors to monitor environmental conditions, a water shield was installed to protect the server from water damage, and the uninterruptible power supply was upgraded. Additionally, the Agency updated its Memorandum of Understanding to incorporate

# EPA's FY 2008 Weaknesses and Significant Deficiencies

#### **Material Weaknesses**

- 1. Physical Security of Critical Assets \*
- 2. Key Applications Need Security Controls \*

#### **Agency-Level Weaknesses**

- 1. Human Capital \*
- 2. Homeland Security \*
- 3. Implementation of Data Standards
- 4. Permit Compliance System
- 5. Key Applications Need Security Controls (downgraded)
- 6. Redistribution of Superfund Payments (new)
- 7. Program Evaluation (new)

#### **Significant Deficiencies**

- 1. Superfund State Cost Share
- 2. Integrated File Management System Suspense Table \*
- \* These were reported as closed for FY 2008.

information on critical server backup and handling of storage media, scanning and monitoring practices, system log practices, and server room access practices.

An evaluation of the installed equipment and review of support documentation were used to validate the effectiveness of corrective actions. The reviews were performed by the Agency and verified by the Office of Inspector General. **EPA has completed corrective actions** associated with this material weakness.

#### **Key Applications Need Security Controls**

In FY 2007, the Office of Inspector General found that two critical applications at EPA's Cincinnati Finance Center, the Billing and Reimbursable Accounting Information Network System and the Relocation Expense Management System, lacked key security planning documents. To remedy these deficiencies, the Agency developed security documents for both applications (security and contingency plans) that comply with federal security requirements specified by the National Institute for Standards and Technology. Additionally, an independent risk assessment was conducted to review and test security controls. The Agency is currently updating the security plans based on the results of the independent risk assessment. A plan of action and milestones were created in the Agency's Automated System Security Evaluation and Remediation Tracking for any deficiencies identified. The Agency believes that corrective actions taken as of September 30, 2008, were sufficient to close this as a material

weakness and has downgraded it to an Agency-level weakness for FY 2009. The remaining corrective action will be completed in the first quarter of FY 2009.

# **Agency-Level Weaknesses**

# Human Capital

In FY 2001, EPA acknowledged human capital as an Agency weakness to address concerns raised by OIG and GAO. Since then, the Agency has made significant progress in strengthening its human capital program, resulting in a "Green" status designation for Human Capital under the President's Management Agenda for every quarter of FY 2008. EPA implemented numerous corrective actions in five major areas:

- Workforce Planning Tracked workforce planning activities to assess and ensure
  alignment between the Agency's strategic plan and its human capital plans; developed and
  implemented EPA plans for workforce planning, succession planning, and recruitment; and
  implemented extensive competency assessment, workforce development, and
  organizational assessment activities.
- Human Capital Accountability Developed an extensive human capital Accountability
  System to monitor performance measures, report progress against human capital initiatives,
  and gauge the Agency's overall effectiveness in achieving its desired human capital results.
- HR Assessments Conducted regular audits and assessments of the effectiveness and
  efficiency of HR operations and compliance with personnel management authorities, as well
  as the overall effectiveness of HC strategic management initiatives.
- **OIG Audit Recommendations** Implemented all of the corrective actions recommended by the OIG 2004 human capital audit.
- Workforce Development Strategy Implemented extensive leadership and workforce development training and improvement programs, including the Agency-wide Successful Leaders Program.

EPA will continue to aggressively implement its workforce planning system, supported by reliable and valid workforce data, to ensure that it hires the right number and type of people and allocates its resources to best meet mission needs. In the context of the Agency's budget process, the Agency has also taken steps to address workload assessment and benchmarking analysis. In 2006, an assessment was conducted which compared EPA workload methodology with other federal agencies. EPA has also issued a contract to explore ways to better assess and benchmark current staff levels against workload shifts, focusing on certain key functional areas that EPA shares with other federal agencies (such as regulatory development and scientific research). This work is expected to take two years to complete.

EPA acknowledges that continued attention and improvement will be necessary to ensure that the Agency's human capital practices adequately prepare EPA for future challenges. This understanding is reflected in current EPA activities such as the Shared Service Center consolidation and the Administrator's "Stronger EPA" initiative. However, after the extensive improvements implemented over the last 7 years, the ongoing work that remains in human capital management no longer meets the threshold of an Agency weakness. The Agency will continue to work closely with OMB and the Office of Personnel Management to meet its human

capital objectives under the President's Management Agenda. **EPA has completed all** corrective actions associated with this weakness. **EPA will continue to address** workforce distribution/resource planning and human resources transactional services at the office-level in FY 2009.

# Homeland Security

In FY 2006, EPA acknowledged homeland security as an Agency weakness in response to concerns raised by the Office of Inspector General. Over the years, EPA has taken action to strengthen its responsibility for homeland security by expanding its homeland security planning and coordination efforts with other federal, state, and local agencies; recognizing a more complete range of issues and information that must be considered in the development of response plans for incidents of national significance; developing a crisis communication plan and identifying responsible parties and roles for crisis communications; and fulfilling basic homeland security requirements.

To respond to growing demands from new Homeland Security Presidential Directives and the increasing complexity of its contribution to homeland security, EPA established the Homeland Security Collaborative Network to coordinate and directly address high-priority, cross-Agency technical and policy issues related to day-to-day homeland security policies and activities.

To improve its processes for identifying, obtaining, maintaining, and tracking response equipment necessary for nationally significant incidents, EPA created and convened the Homeland Security Policy Coordinating Committee. This executive committee, activated after a homeland-security-related attack, brings together the Agency's senior political leadership to provide policy direction to responders.

In FY 2008, EPA revised the Homeland Security Priority Work Plan (2008–2010), the Agency's overarching planning framework for identifying and aligning cross-Agency homeland security programs with EPA's highest homeland security priorities. The Plan identifies Presidential and other externally driven homeland security mandates and outlines EPA's continuing efforts to advance the Agency to the next level of preparedness.

EPA has been called on to respond to five major disasters and nationally significant incidents in the past seven years: the 9/11 terrorist attacks, the anthrax terrorist incidents, the Columbia Shuttle disaster and recovery efforts, the ricin incident on Capitol Hill, and the Gulf Coast hurricanes. These responses have reinforced the importance of a continued focus on improving the Agency's environmental homeland security focal areas: detection, prevention, and mitigation and field preparedness and response. Within these areas, EPA identified and continues to focus on four homeland security priorities: water security, decontamination, emergency response, and internal preparedness. These priority areas have been identified as the result of external entities assigning EPA specific responsibilities or through homeland security requirements and assignments.

Additionally, EPA developed three tiers of information to be responsive to its homeland security mandates. This information forms the basis for understanding EPA's highest homeland security priorities and serves as a way to assess short-, medium-, and long-term goals and results. The three tiers are:

- **Desired end states.** These describe the final outcomes of homeland security projects or efforts once EPA believes it has met the President's or other externally imposed directives (e.g., Homeland Security Presidential Directives).
- **Desired results.** These reflect specific programmatic areas through which EPA seeks to make progress toward the desired end state.
- Action items. EPA's FY 2008–2010 action items reflect specific program and regional office plans (e.g., projects or efforts) to progress toward desired results and ultimately reach EPA's desired end state.

EPA will continue to use its Homeland Security Priority Work Plan as a systematic method to assess homeland security priorities and projects annually. Additionally, the Agency will rely on audits and evaluations conducted by the Office of Inspector General to help ensure that it achieves its homeland security objectives and that its appropriations supporting homeland security are spent efficiently and effectively. **EPA has completed all corrective actions associated with this weakness.** 

#### Implementation of Data Standards

In FY 2005, EPA acknowledged implementation of data standards as an Agency weakness. EPA needs to establish a process for ensuring that each data standard adopted by the Agency is fully implemented in a cost-effective and timely manner.

The Agency has made progress in addressing the implementation of data standards. EPA has completed all of the corrective actions associated with this weakness. However, it will continue to monitor ongoing activities, such as tracking program implementation of data standards, to validate the effectiveness of its actions. The validation strategy will include continuous monitoring of implementation of data standards within the Registry of EPA Applications and Databases, as well as publication of the semi-annual Data Standards Report Card. **EPA expects to complete all corrective actions by the end of FY 2010.** 

#### Permit Compliance System

In FY 1999, EPA acknowledged its Permit Compliance System (PCS) as an Agency weakness. EPA needs to revitalize or replace the system to provide information in a format that both the states and EPA can use to ensure complete and accurate National Pollutant Discharge Elimination System (NPDES) permit and discharge data.

EPA has developed and successfully implemented a modernized, national information system designed to meet the needs of today's NPDES permitting and enforcement program—the Integrated Compliance Information System (ICIS). However, not all of the states have yet been migrated from the PCS to the new system. The closure date for this weakness has been extended until the new system can accommodate the electronic transfer of data from state systems and all states have been moved from the PCS to the new system.

The final closure date for this Agency weakness is now projected to be the end of third quarter FY 2013 (with the PCS to be shut down in FY 2014). This completion date is based on various assumptions and estimates that extend more than 6 years into the future. Because long-range

predictions of the key variables and assumptions that may affect this effort are difficult and risky, however, this completion date should be recognized as speculative.<sup>1</sup>

Currently, 22 states, two tribes, and nine territories are using the new system. Twenty-one of these states are generally referred to as "direct users," since they directly use ICIS to manage the NPDES program. Two other groups of states are still using PCS and need to be moved to ICIS:

- "Hybrid states" use PCS and their own state systems to manage the NPDES program. Thus
  the hybrid states will need to be able to electronically transfer (batch) the Discharge
  Monitoring Report data from their systems to the new system.
- Full batch states have their own NPDES information systems and do not use the PCS to directly manage the NPDES program. Thus, these states need to electronically transfer (batch) all of the necessary data from their systems into the new system.

In May 2008, EPA migrated the first "hybrid state" by implementing the Discharge Monitoring Report batch component of ICIS, which allows for the submission of NPDES Discharge Monitoring Report data from state systems to ICIS in the Extensible Mark-up Language format via the National Environmental Information Exchange Network and EPA's Central Data Exchange. Approximately seven additional states (four "hybrid" and three "direct users") will be migrated to ICIS with the completion of the Discharge Monitoring Report batch component of ICIS in FY 2008.

In FY 2008 EPA also conducted, with input from states, an Alternative Analysis of the ICIS business case which includes an analysis of technical approaches for developing the full batch component of the PCS modernization. The Office of Management and Budget requires all federal agencies to periodically conduct Alternative Analyses of their large information systems to evaluate the benefits and costs of the current systems in achieving the business need, and to compare this status quo to three alternative approaches for meeting the same business need. If, based on the results of the Alternative Analysis, the Agency decides to change the currently planned technical approach for completing the full batch component of PCS modernization, a new plan for completing the full batch component of PCS Modernization will need to be developed, which will result in revised costs and new completion dates.<sup>2</sup> **EPA expects to complete all corrective actions by the end of FY 2013.** 

To submit comments or questions on the FY 2008 PAR, please e-mail: ocfoinfo@epa.gov.

<sup>&</sup>lt;sup>1</sup> Because this completion date is based on various assumptions about the future, changes to the assumptions will affect the projected schedule. For example, if, based on the results of the Alternative Analysis of ICIS to be completed by September 30, 2008, the Agency decides to change its current technical approach for completing the full batch component of PCS modernization, a new project plan for completing PCS modernization will required. The FY 2013 completion date assumes no changes to current plans for the technical approach and also assumes FY 2008 and FY 2009 extramural funding for ICIS at the President's budget amount of \$6.7 million. For FY 2010 and beyond, we assumed that annual funding will rise to \$7.5 million. (The Office of Enforcement and Compliance Assurance assumes, however, that if the President's \$6.7 million budget level continues in FY 2010 and beyond, the schedule would likely move five or more quarters into the future, with a shutdown date for PCS delayed until FY 2015). As with any project, extended timelines pose uncertainties, and predictions about when the project will be completed become more speculative.

<sup>&</sup>lt;sup>2</sup> The new plan is for the full batch component only. PCS modernization for the direct user states was implemented in FY 2006. PCS modernization for the hybrid states was implemented in FY 2008. These

# **Key Applications Need Security Controls**

In FY 2007, the Office of Inspector General found two critical applications at EPA's Cincinnati Finance Center, the Billing and Reimbursable Accounting Information Network System and the Relocation Expense Management System, lacked key security planning documents. To remedy these deficiencies, the Agency developed security documents for both applications (security and contingency plans) that comply with federal security requirements specified by the National Institute for Standards and Technology. Additionally, an independent risk assessment was conducted to review and test security controls. The Agency is currently updating the security plans based on the results of the independent risk assessment. A plan of action and milestones were created in the Agency's Automated System Security Evaluation and Remediation Tracking for any deficiencies identified.

Corrective actions taken during FY 2008 were sufficient to close "Key Applications Need Security Controls" as a material weakness, and it has been downgraded from a material weakness to an Agency-level weakness. EPA expects to complete all corrective actions in the first quarter of FY 2009.

# Redistribution of Superfund Payments

In its July 2006 report, *EPA Could Improve Its Redistribution of Superfund Payments to Specific Sites*, the Office of Inspector General states that EPA did not make timely redistribution of Superfund cooperative agreements, interagency agreements, and small purchase payments from the general site identifier "WQ" to the specific Superfund site or other general site identifiers. The Office of Inspector General recommends that EPA 1) develop written "WQ" procedures for implementing Superfund site—specific accounting policies, 2) provide an appropriate level of training for responsible personnel, 3) change cooperative agreement conditions to require recipients to provide cost details within 24 hours of drawing down funds, and 4) redistribute the remaining historical "WQ" costs.

The Agency acknowledges this as an Agency-level weakness and is taking action to address the Office of Inspector General's concerns. For instance, between May 2006 and December 2007, the Agency implemented procedures that significantly decreased the undistributed "WQ" costs for cooperative agreements and small purchases. The Agency has formed a workgroup, composed of staff from the Office of the Chief Financial Officer, Office of Administration and Resource Management, and Office of Solid Waste and Emergency Response, charged with developing guidance on Superfund site charging. Additionally, the Agency plans to issue new policies and procedures under its Resource Management Directives System that will incorporate Office of Inspector General audit recommendations. EPA will use reports generated by the financial management system to develop baseline data against which the Agency can measure progress toward correcting this weakness. **EPA expects to complete all corrective actions by the end of FY 2009.** 

#### **Program Evaluation**

In its September 2007 report, *Using the Program Assessment Rating Tool as a Management Control Process*, the Office of Inspector General identified several limitations to systematically

components of ICIS for direct and hybrid states, along with the core federal enforcement and compliance and NetDMR components of ICIS, are not expected to be changed by the Alternative Analysis.

conducting program evaluations at EPA. These include: 1) lack of internal expertise; 2) lack of external expertise; 3) funding limitations; 4) the need for strategic investment in program evaluation; 5) complexity of measuring long-term outcomes; 6) insufficient data/performance measurement information; and 7) limited program evaluation partnerships with states.

EPA managers recognize the need to strengthen program evaluation as part of the Agency's overall effort to improve performance management and acknowledge program evaluation as an Agency-level weakness. EPA is already taking steps to strengthen its program evaluation capability. The Agency will develop a detailed corrective action strategy and validation plan to fully address this weakness. **EPA expects to complete all corrective actions by the end of FY 2011.** 

# **Significant Deficiencies**

# Superfund State Cost Share (Improved Quarterly Cost Reporting)

The Agency identified Superfund state cost share as a significant deficiency under its FY 2006 review of internal controls over financial reporting. The deficiency relates to how efficiently EPA tracks Superfund state cost share contributions and matches them to expenses each quarter. To remedy this significant deficiency, EPA has taken steps to centrally automate the Superfund state cost share accrual process. **EPA expects to complete all corrections by the end of FY 2009.** 

# Integrated File Management System Suspense Table

In FY 2007, the Agency acknowledged the need to increase its controls over the Integrated Financial Management System Suspense Table and improve its practices for removing financial transactions that do not process completely in the Integrated Financial Management System.

To remedy this significant deficiency, the Agency no longer systematically purges aged data from the Integrated Financial Management System. In FY 2008, EPA revised its policy to ensure that documents in the Integrated Financial Management System Suspense Table are reviewed, processed, or deleted in a timely manner. Users are now required to proactively manage their own pending transactions so they do not sit on the Integrated Financial Management System Suspense Table for a long time. This ensures that Agency activity is posted in the correct accounting period. The Agency has also established controls to automatically notify Integrated Financial Management System users, their supervisors, and ultimately their senior manager (Assistant Administrator or Regional Administrator) of pending transactions that remain in the Integrated Financial Management System Suspense Table for too long. The new process has been validated and the number of Suspense Table transactions has been reduced by 99.2%. **EPA completed all corrective actions associated with this significant deficiency.** 

# **SUMMARY OF FINANCIAL STATEMENT AUDIT**

Audit Opinion	Unqualified	I			
Restatement	No				
Material Weaknesses	Beginning Balance	New	Resolved	Consolidate d	Ending Balance
Key Applications Need Security Controls	1	0	1	0	0
Physical Security of Critical IT Assets	1	0	1	0	0
Total Material Weaknesses	2	0	2	0	0

# **SUMMARY OF MANAGEMENT ASSURANCES**

				<del>/=</del>								
Effectiveness of Internal			ial Reportir	ng (FMFIA § 2)	(A-123 Append	dix A)						
Statement of Assurance	Unqualifie	d	•	T	1	T						
	Beginning					Ending						
Material Weaknesses	Balance	New	Resolved	Consolidated	Reassessed	Balance						
Total Material Weaknesses	0	0	0	0	0	0						
			ol Over Ope	erations (FMFI	4 § 2)							
Statement of Assurance	Unqualifie	d										
Material Weaknesses	Beginning					Ending						
	Balance	New	Resolved	Consolidated	Reassessed	Balance						
Not Applicable (N/A)	0	0	0	0	0	0						
Total Material Weaknesses	0	0	0	0	0	0						
Conformance With	n Financial M	lanagen	nent System	Requirements	s (FMFIA § 4)							
Statement of Assurance				ancial Manager								
	Requireme			9	,							
	Beginning					Ending						
Non-Conformances	Balance	New	Resolved	Consolidated	Reassessed	Balance						
Key Applications Lack	1	0	1	0	0	0						
Security Requirements												
Physical Security of Critical IT	1	0	1	0	0	0						
Assets												
Total Non-Conformances	2	0	2	0	0	0						
Compliance With	Federal Fin	ancial M	anagement	Improvement	Act (FFMIA)							
-			Agency	_	Auditor							
Overall Substantial Compliance	)		Yes		Yes							
System Requirement				Yes								
Accounting Standards				Yes								
3. USSGL at Transaction Leve	I			Yes								

# FY 2008 Key Management Challenges Identified by the Office of Inspector General and EPA's Response

The Reports Consolidation Act of 2000 requires that each year, the Office of Inspector General identify, briefly assess, and report the most serious management challenges facing EPA. In FY 2008, the Office of Inspector General revised its definition of management challenges to distinguish them from internal control weaknesses. A weakness is a deficiency in the design or operation of a program, function, or activity, which the Agency can correct. In contrast, a management challenge is a lack of capability derived from internal self-imposed or externally imposed constraints that prevent an organization from reacting effectively to a changing environment. Addressing a management challenge may require assistance from outside of EPA and take years to fully resolve.

For FY 2008, the Office of Inspector General identified eight management challenges, detailed in the Office of Inspector General's memorandum to the Administrator which is included below. EPA's response to each of these challenges follows the memorandum.

The Office of Inspector General's List of Key Management Challenges for FY 2008

The Office of Inspector General's List of Key Mai	lageille	SIIL OIIE	illelige.	3 101 1 1 <b>2</b> 0	00
EPA's Top Major Management Challenges Reported by the Office of Inspector General	FY 2006	FY 2007	FY 2008	Link to EPA Strategic Goal	Link to President's Management Agenda
Performance Measurement:* EPA must focus on the logic and design of its measures for success and efficiency, along with data standards and consistent definitions, to ensure that usable, accurate, timely, and meaningful information is used to evaluate and manage EPA programs, operations, processes, and results.	·			Cross-Goal	Performance Improvement, E-Gov
Meeting Homeland Security Requirements:** EPA needs to implement a strategy to effectively coordinate and address threats, including developing a scenario to identify resource needs, internal and external coordination points, and responsible and accountable entities.	•		•	Cross-Goal	Performance Improvement
Threat and Risk Assessments: The Agency does not comprehensively assess threats to human health and the environment across media to ensure EPA's actions are planned, coordinated, designed and budgeted to most efficiently and effectively address environment risks. The fragmentary nature of EPA's approach continues as environmental laws often focus on single media or threats.			•	Cross-Goal	Performance Improvement
EPA's Organization and Infrastructure:*** EPA maintains 204 offices and laboratories in 144 locations with over 18,000 staff members. With diminishing resources, the autonomous nature of regional and local offices, and the growing pressure to expand its role globally, EPA will be challenged to assess the efficiency and effectiveness of its current structure to identify opportunities for consolidating and reducing costs.	•		•	Cross- Goal	Performance Improvement, Financial Performance, Human Capital
Water and Wastewater Infrastructure: Drinking water and wastewater treatment systems are wearing out and it will take huge investments to replace, repair, and construct facilities.	•	•	•	Goal 2	Performance Improvement
Oversight of Delegations to States: * Implementing EPA's programs, enforcement of laws and regulations, and reporting on program performance has to a large extent been delegated to States and tribes, with EPA retaining oversight responsibility. However, inconsistent capacity and interpretation of responsibility among State, local, and tribal entities limits accountability for and compliance with environmental programs and laws.				Goal 4 Goal 5	Performance Improvement
Chesapeake Bay Program: After 20 years of effort by federal, State, and local governments, Bay waters remain degraded and required nutrient and sediment reductions will not be met by the 2010 target. EPA needs to institute management controls ensuring that actions to manage land development, agricultural runoff, nutrient reduction technology, and air emissions are implemented, and that consistent sources of funding are identified by EPA partners.			•	Goal 2 Goal 4	Performance Improvement
Voluntary Programs – Update:**** EPA must ensure that applying voluntary approaches and innovative or alternative practices to provide flexible, collaborative, and market-driven solutions for measurable results are managed using standards, consistent processes, and verifiable data, to ensure that programs are efficiently and effectively providing intended and claimed environmental benefits.	•		•	Cross-Goal	Performance Improvement

<sup>\*</sup> FY 2004 and 2005 Working Relationships with the States and Linking Mission to Management were consolidated into Managing for Results. FY 2006 and FY 2007 Managing for Results and Data Gaps were merged into Performance Management

<sup>\*\*</sup> FY 2006 and 2007 titled Agency Efforts in Support of Homeland Security

<sup>\*\*\*</sup> FY 2007 this topic was include in Workforce Planning and in FY 2005 and 2006 in Human Capital Management

<sup>\*\*\*\*</sup> FY 2006 and 2007 Voluntary Programs included Alternative and Innovative Practices and Programs

Data Quality, Emission Factors for Sources of Air Pollution, Privacy Program, and Workforce Planning Reported as Key Management Challenge in FY 2006 and 2007 were reported as Internal Control Weakness in FY 2008



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

July 2, 2008

OFFICE OF INSPECTOR GENERAL

#### **MEMORANDUM**

**SUBJECT:** EPA's Key Management Challenges for Fiscal Year 2008

**TO:** Stephen L. Johnson

Administrator

We are pleased to provide you with the list of items the Office of Inspector General (OIG) considers to be the key management challenges for Fiscal Year 2008 confronting the U.S. Environmental Protection Agency. This year the OIG revised the definition used for management challenges to clarify and distinguish between internal control weaknesses and management challenges. In general, internal control weaknesses are deficiencies in internal control determined in relation to a standard derived from the concept of internal control as an activity. In contrast, management challenges are defined as a lack of capability derived from internal self-imposed constraints or, more likely, externally imposed constraints that prevent an organization from reacting effectively to a changing environment. For example, lack of controls over approval of bankcard purchases would be considered a control weakness because it can be corrected by adding the necessary controls. Conversely, the Agency's ability to address an issue such as funding shortfalls for water infrastructure repairs would constitute a management challenge because the Agency does not have the ability to solve this challenge without outside assistance, such as from Congress and States.

Our decision to include the areas listed is based primarily on audit, evaluation, or investigative work we performed and additional analysis of Agency operations. Thus, it is possible that additional challenges exist in areas that we have not yet reviewed or that other significant findings could result from additional work. Our key management challenges are listed below with detailed summaries provided in Attachment 1. We would welcome the opportunity to discuss your reaction to the list and any comments you might have.

Management Challenge	Page
Threat and Risk Assessments	1
EPA's Organization and Infrastructure	3
Performance Measurement	5
Water and Wastewater Infrastructure	7
Meeting Homeland Security Requirements	9
Oversight of Delegations to States	11
Chesapeake Bay Program	13
Voluntary Programs - Update	15

We removed Data Standards and Data Quality, Privacy Program, Information Technology System Development and Implementation, Workforce Planning, and Emission Factors from this year's management challenges list, and they are currently included as proposed internal control weaknesses under the category Data Quality and Standards. The previous challenges Managing for Results and Data Gaps have been combined and the title changed to Performance Measurement. Voluntary Programs has been removed from the current list, but we are including an update on the actions and concerns remaining for Voluntary Programs.

Bill A. Roderick /signed/ Deputy Inspector General

#### **Threat and Risk Assessments**

EPA needs to periodically assess threats to human health and the environment across media to ensure that resources and priorities focus on the highest risks, regardless of the source. Presently, EPA's strategic goals stress reducing risks to human health and the environment from distinct sources – such as air pollution, water pollution, and hazardous releases on land. This is feasible because EPA invests in science to enhance its understanding of health and ecological implications, enabling it to identify and develop risk assessment methodologies. Risk assessors can use these methodologies to evaluate the adequacy of current exposure assessment approaches. Risks are assessed within each of the Agency's strategic goals – for example, for air pollution effects, radiation, waste treatment, Superfund cleanups, etc. However, the Agency does not assess threats to human health and the environment across media to ensure EPA's actions are designed to reduce total risk in the most efficient manner.

Nearly 20 years ago the Science Advisory Board (SAB) recommended that EPA target its environmental protection efforts on the basis of opportunities for the greatest risk reduction.<sup>3</sup> This 1990 report described the fragmentary nature of U.S. environmental policy and the frequently inconsistent and uncoordinated efforts to address environmental problems. Based on the OIG's body of work, we believe the same problem exists today. The fragmentary nature of EPA's approach continues because the underlying conditions remain: environmental laws are often focused on a single media or threat, Agency goals and units are designed to implement separate legislative mandates, and available technological solutions address specific pollutant sources.<sup>4</sup> Some EPA programs, like the Chesapeake Bay Program and the Border 2012 Program, are designed to address ecosystem or geographically defined environmental issues rather than single media concerns. However, even these are organized and implemented to solve the threats and risks faced by individual media. For example, the Border 2012 goals are to reduce water contamination, reduce air pollution, reduce land contamination, etc. The relative threats and risks to human health and the environment are not determined or used to prioritize EPA's efforts.

A need to measure the human health impacts of EPA programs and measure the total reductions in pollution hazard and exposure has been recognized by the Office of Management and Budget. For example, the Office of Management and Budget asked the Office of Enforcement and Compliance Assurance (OECA) to develop and apply measures that assessed the human health impacts of pollution reduction achieved by enforcement and compliance assurance activities, rather than output measures (pounds of pollution reduced).<sup>5</sup>

EPA could benefit from a periodic risk assessment to validate its priorities. For example, the Department of Defense conducts a Quadrennial Review designed to identify threats and risks faced by the military and then define appropriate strategies, priorities, and resources. An independent comprehensive risk assessment would help ensure that EPA can establish appropriate risk-based priorities in its strategic planning and budgeting processes. The diminishing resources available for environmental protection increase the need to ensure that EPA does not expend resources on lower-priority problems at the expense

<sup>&</sup>lt;sup>1</sup> FY 2008 EPA Budget in Brief.

<sup>&</sup>lt;sup>2</sup> Testimony of Stephen L. Johnson before the Senate Committee on Environment and Public Works, February 27, 2008.

<sup>&</sup>lt;sup>3</sup> Reducing Risk: Setting Priorities and Strategies for Environmental Protection, EPA-SAB-EC-90-021, September 1990.

<sup>&</sup>lt;sup>4</sup> Reducing Risk: Setting Priorities and Strategies for Environmental Protection, EPA-SAB-EC-90-021, September 1990.

<sup>&</sup>lt;sup>5</sup> OECA Memorandum, re: Request for the Inspector General's Assistance to Improve and Expand OECA's Use of Outcome-Based Performance Measures, September 29, 2004.

of higher-priority risks. As the SAB concluded previously, "If priorities are established based on the greatest opportunities to reduce risk, total risk will be reduced in a more efficient way, lessening threats to both public health and local and global ecosystems."

To create and implement a risk-based strategy, EPA should revisit recommendations originally proposed by the SAB to establish the necessary institutional framework and scientific capabilities. For example, EPA should assign a specific management focal point for assessing risk and to assure accountability, establish a risk reduction framework, establish a formal mechanism for risk anticipation, and expand long-range research on assessing human exposure and the toxicological science base. Moreover, to institutionalize a relative risk assessment process, EPA will need to ensure that it has the trained personnel and scientific databases that lead to credible analyses and policy.

# **EPA's Organization and Infrastructure**

In July 1970, the first Administrator formally organized EPA. The original organizational structure was based upon existing environmental legislation and encompassed discrete media programs for water, air, pesticides, radiation, and solid waste, as well as 10 regional offices and a handful of laboratories inherited from other federal agencies. Since that time additional responsibilities have been delegated to EPA. For example, in recent years, EPA was assigned additional Homeland Security responsibilities. In addition, how EPA carries out its programs has changed. Implementation of many environmental programs has been delegated to the States with EPA's role evolving to planning and oversight. In recent years, EPA has increased the extent to which it partners with other federal agencies; State, local, and tribal governments; and the private sector to accomplish its mission. <sup>10</sup>

Since its inception, the number of EPA personnel has grown from about 5,000 to over 18,000.<sup>11</sup> As the number of personnel has increased, so has EPA's infrastructure. EPA's portfolio now includes 204 offices and laboratories in 141 locations throughout the country.<sup>12</sup> Some EPA regions maintain the majority of the staff in a main regional headquarters office, while others also maintain a number of separate operations offices located in States.<sup>13</sup> For example, California and Florida each have seven separate EPA offices. EPA's Office of Research and Development maintains 13 independent laboratories, while EPA's regional offices maintain separate regional laboratories. EPA maintains two offices each in Guam, Puerto Rico, and the Virgin Islands.

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<sup>&</sup>lt;sup>6</sup> <u>Reducing Risk: Setting Priorities and Strategies for Environmental Protection</u>, EPA-SAB-EC-90-021, September 1990, p.2.

Reducing Risk: Setting Priorities and Strategies for Environmental Protection, EPA-SAB-EC-90-021, September 1990, p.6; Reducing Risk Appendix A: The Report of the Ecological and Welfare Subcommittee, EPA-SAB-EC-90-021A, September 1990, pp.66-70; Relative Risk Reduction Project. Reducing Risk Appendix B: The Report of the Human Health Subcommittee, EPA-SAB-EC-90-021B, September 1990, pp.6-10; Relative Risk Reduction Project Reducing Risk Appendix C: The Report of the Strategic Options Subcommittee; Relative Risk Reduction Project, EPA-SAB-EC-90-021C, September 1990, p.26;

<sup>&</sup>lt;sup>8</sup> Studies Addressing EPA's Organizational Structure, EPA OIG Report No. 2006-P-00029, August 16, 2006

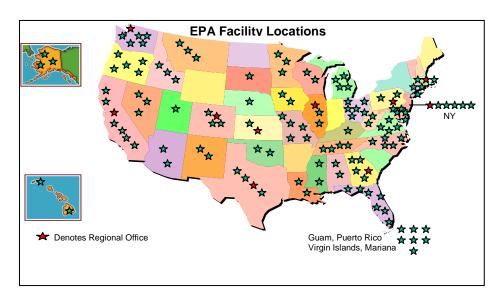
<sup>&</sup>lt;sup>9</sup> EPA Strategic Plan for Homeland Security September 2002

http://www.epa.gov/ocir/nepps/jps.htm

<sup>&</sup>lt;sup>11</sup> Personnel figures – EPA's Office of Human Resources

<sup>&</sup>lt;sup>12</sup> EPA Office of Human Resources

<sup>&</sup>lt;sup>13</sup> Ref – EPA Region 10 Organization



Of EPA's 204 facilities, there are 49 with just 1 person and 88 which house 5 or fewer employees.<sup>14</sup> According to EPA's Office of Administration and Resources Management, many of the small offices are temporary in nature and are established to handle a specific situation.

Part of the President's Management Agenda calls for federal agencies to strategically address human capital. One of the action items in the Agenda calls for an analysis of existing organizational structures from service and cost perspectives, and implementing a plan for optimization using various tools, including redeployment, restructuring, and competitive sourcing. The Agency's current strategic plan calls for having the "right people, in the right place, at the right time." However, since EPA's formation in 1970, a comprehensive study has not been completed to analyze EPA's mission and the related number and location of employees needed to most effectively carry out EPA's mission at the least cost. For example, with the increase in programs delegated to the States, EPA's role and ability to conduct effective oversight of States becomes increasingly important. EPA might conduct an evaluation of the costs and benefits realized by those regions maintaining separate operations offices in States versus maintaining large regional offices. EPA might also consider conducting a review of the rationale and benefits associated with maintaining its cadre of regional and Research and Development laboratories around the country to determine whether they are sited in the appropriate locations for the type of work performed.

Maintaining over 200 facilities is resource-intensive. For Fiscal Year (FY) 2008, the budget for maintaining EPA's facilities is nearly half a billion dollars. Demonstrating the effectiveness of these operations as well as the cost effectiveness of maintaining over 200 locations presents EPA with challenges and opportunities for potential consolidation and cost savings. Because of the autonomous nature of EPA and its regional and local offices, undertaking such a study may require the assistance of an independent commission and agreement from EPA's many oversight committees. With diminishing resources along with growing pressure to expand EPA's role in the global arena, EPA will be challenged to reduce operating costs while expanding its mission. A comprehensive study to assess EPA's mission, workforce, and infrastructure requirements would provide a rational basis for addressing these challenges.

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<sup>&</sup>lt;sup>14</sup> OIG analysis of EPA Office of Human Resource data

<sup>&</sup>lt;sup>15</sup> OIG analysis of EPA budget

#### **Performance Measurement**

Congress' desire to hold agencies accountable for performance was the motivating force behind the Chief Financial Officers Act of 1990 and the Government Performance and Results Act of 1993. While the Chief Financial Officers Act established the foundation for improving management and financial accountability, the Government Performance and Results Act created requirements for agencies to generate performance information that congressional and executive branch decision makers need in considering measures to improve government and reduce costs.<sup>16</sup>

EPA has been recognized for its efforts to align its budgeting, planning, and accounting systems to track and report on resource use. However, EPA continues to be challenged in measuring the human health and environmental results of its environmental programs. Despite the vast array of data reported and contained in EPA's information systems, the Government Accountability Office (GAO), the States, regulated entities, and EPA have pointed out that the Agency does not have much of the information it needs pertaining to environmental conditions and trends and the potential human health risks of various pollutants. This makes it difficult to evaluate and report on the benefits derived from environmental activities and make optimal decisions about how to invest EPA's resources to maximize environmental results.<sup>17</sup>

During a recent audit, we found that while many of EPA's programs received high scores for the program purpose and program management categories on the Office of Management and Budget's Program Assessment Rating Tool, EPA did not receive high marks for using information to manage programs and demonstrate results. Of the 51 programs reviewed, 41 percent (21 programs) did not regularly collect timely and credible performance information, including information from key program partners, and use it to manage the program and improve performance.<sup>18</sup>

EPA is challenged in measuring its performance because measuring environmental results is inherently difficult. Results are not always immediately recognized and programs may take several years to demonstrate results. In addition, linking environmental activities to outcomes is complicated by a myriad of external factors, including weather, international environmental issues, economic activity, and others which are outside of EPA's control. As a result, many of EPA's performance measures focus on program activities (number of enforcement actions, pounds of hazardous waste reduced, number of permits issued, number of training sessions held, etc.). While these may be good indications of amount of work performed, they do not measure the corresponding improvements to human health or the environment. Compounding these factors, a majority of EPA's performance information is collected and reported by program partners who do not always agree on how and what information should be collected or tracked, and who do not report the information to EPA in a consistent manner.

To address these factors, EPA management needs to make a concerted effort to focus on the logic of program design and ensure that the design includes controls so that managers can measure, evaluate, and demonstrate results for the resources used. Designing programs with clear and measurable results allows

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<sup>&</sup>lt;sup>16</sup> Chief Financial Officer Act of 1990, Government Performance and Results Act of 1993

<sup>&</sup>lt;sup>17</sup> Using the Program Assessment Rating Tool as a Management Control Process, EPA OIG Report No. 2007-P-00033, September 12, 2007

<sup>&</sup>lt;sup>18</sup> Using the Program Assessment Rating Tool as a Management Control Process, EPA OIG Report No. 2007-P-00033, September 12, 2007

<sup>&</sup>lt;sup>19</sup> EPA's Progress in Using the Government Performance and Results Act to Manage for Results, EPA OIG Report 2001-B-000001, June 13, 2001

<sup>&</sup>lt;sup>20</sup> EPA Strategic Plan 2006-2011, September 30, 2006

<sup>&</sup>lt;sup>21</sup> EPA's Progress in Using the Government Performance and Results Act to Manage for Results, EPA OIG Report No. 2001-B-000001, June 13, 2001

for transparency of, and accountability for, program performance. Program design and the strategic planning process should include defining measures as well as ensuring the appropriate agreements, funding, processes, and systems are considered to obtain the necessary information. EPA also needs to ensure program managers are held accountable for ensuring that programs are designed with the means to measure and demonstrate program results and that the information gathered is used to manage and improve program results.<sup>22</sup>

#### Water and Wastewater Infrastructure

Approximately 160,000 public drinking water systems provide the Nation with drinking water, while 16,000 sewage treatment plants treat and dispose of wastewater. Under the Clean Water Act and Safe Drinking Water Act, water and wastewater facilities are responsible for treating water to specified levels. EPA is responsible for administering these laws and has a role in assisting facilities to meet their treatment requirements.

According to EPA, approximately 240,000 water main breaks and 75,000 sewer overflows occur each year, resulting in threats to public health across the country. Some of the Nation's water infrastructure systems have components over 100 years old. As an example of the magnitude of the costs, a single city, the District of Columbia, has estimated that it will need to expend \$3.6 billion to meet various requirements of the Clean Water Act. Nationally, the cost will be extremely large. EPA has estimated that approximately \$1 trillion dollars will be needed to pay for water and wastewater infrastructure over the next 20 years. EPA also estimates that utilities are planning to spend only about half that amount over that same time. The remaining \$500 billion has been termed the "water and wastewater infrastructure gap." The gap represents infrastructure failures that could increase risks to public health and the environment, as well as damage the national economy.

America's water and wastewater assets are critical to the country's public health, economy, and environment. Meeting standards requires regular investment for treatment plants and distribution systems. Water and wastewater facilities have made considerable capital expenditures. Local governments spend more on water infrastructure than they do on everything else except education. However many drinking water and wastewater systems across the country are failing to keep up with repairs and new construction required to maintain compliance with federal water standards. Many systems still need to build new facilities and distribution systems, and repair and replace aging infrastructure. Further, increasingly stringent standards could compel systems to make even more extensive capital improvements. For example, many wastewater treatment plants are beginning to install costly nutrient removal technologies. Drinking water facilities will also need to meet new standards. In 2006, EPA issued three new rules<sup>28</sup> and made substantial revisions to the existing Lead and Copper Rule. These rules promise safer drinking water and cleaner recreational waters. Implementation will increase the cost through upgrades to meet new requirements, and so the infrastructure gap could continue to grow in size.

http://archive.nacwa.org/getfile.cfm?fn=2007cso-a.russell.ppt.

<sup>&</sup>lt;sup>22</sup> Using the Program Assessment Rating Tool as a Management Control Process, EPA OIG Report No. 2007-P-00033, September 12, 2007

<sup>2007-</sup>P-00033, September 12, 2007

http://www.epa.gov/ogwdw/sdwa/basicinformation.html and http://www1.eere.energy.gov/femp/pdfs/bamf\_wastewater.pdf

<sup>24</sup> http://www.epa.gov/nrmrl/pubs/600f07015/600f07015.pdf

http://www.epa.gov/oGWDW/gapreport.pdf, http://www.epa.gov/owm/mtb/cwns/index.htm and http://www.epa.gov/safewater/needssurvey/index.html

http://usmayors.org/urbanwater/07expenditures.pdf

<sup>&</sup>lt;sup>28</sup> The three new rules were: Long Term 2 Enhanced Surface Water Treatment Rule (January 2006), Stage 2 Disinfection Byproducts Rule (January 2006), and Final Ground Water Rule (November 2006)

Presently, the Federal Government does not have a national approach to bridging the water and wastewater infrastructure gap. EPA's Clean Water and Drinking Water State Revolving Funds received about \$1.7 billion in federal capitalization grants in FY 2006.<sup>29</sup> The U.S. Department of Housing and Urban Development and U.S. Department of Agriculture also provided systems with grant and loan assistance of about \$2 billion in FY 2006.<sup>30</sup> The programs are not part of a comprehensive investment strategy to address water infrastructure needs; they reflect each individual agency's mission and congressional direction. Additionally, the federal aid, as well as aid from State funding programs, is already considered in computing the size of the funding gap.

EPA also addresses the gap by advocating for its "Four Pillars of Sustainable Infrastructure." One pillar is "full cost pricing." Reviews have shown that many local users resist full cost pricing. For example, Pennsylvania is being sued by a group of localities over more stringent permit limits required to meet Chesapeake Bay water quality standards. The localities consider the required investment to meet Chesapeake Bay water quality standards an "unfunded mandate" pushed onto local rate payers. EPA supplements its "full-cost pricing" advocacy with programs organized around the remaining three pillars: "Effective Management," "Water Efficiency," and "Watershed Approaches." In short, infrastructure funds need to be used effectively. The Office of Water's Better Management Website, for instance, contains several links to information geared at improving management practices within the water sector. EPA has also established a "National Alliance for Water Efficiency." Other programs, such as EPA's advocacy for "green infrastructure" to reduce storm runoff, contribute to reducing future infrastructure needs. All increases and the programs of the program of the program

EPA's current approach, based on providing a relatively small amount of funding to State revolving funds and operating programs such as those under the "Four Pillars of Sustainable Infrastructure," is helpful. Other federal agencies contribute as well. However, this approach does not represent a coherent national strategy for resolving the problem of aging and deteriorating infrastructure. A comprehensive approach would realistically assess the investment requirements, and work with States and local governments to organize resources to meet needs. It would also alert the public and Congress of the unfunded liabilities and risks. While EPA has responsibility for administering the Clean Water Act and the Safe Drinking Water Act, EPA does not have resources or authority to address this gap by itself. EPA needs to ensure there is a comprehensive federal understanding of the risks to public health, the environment, and the economy if this critical resource gap remains unresolved. EPA should also take the lead in organizing a coherent federal strategy within the limits of its statutory authorities and responsibilities.

#### **Meeting Homeland Security Requirements**

EPA has faced unprecedented challenges in responding to incidents of national significance including the World Trade Center and Pentagon terrorist attacks, and Hurricanes Katrina and Rita. These events elevated the Nation's expectations of EPA's emergency response role. Over the last several years these expectations have formally expanded EPA's traditional emergency response function. The 2004 National Response Plan, the 2008 National Response Framework, and multiple Homeland Security Presidential

<sup>&</sup>lt;sup>29</sup> http://www.epa.gov/safewater/dwsrf/allotments/funding\_dwsrf\_allotments-2006.html and

Water and Environmental Programs, Annual Activity Report, Fiscal Year 2006, USDA Rural Development, p. 6.

http://www.hud.gov/offices/cpd/communitydevelopment/budget/disbursementreports/profiles/National\_E xpenditure\_FY07.xls

<sup>31</sup> http://www.epa.gov/waterinfrastructure.

<sup>&</sup>quot;Bill for upgrades at PA water plants creates sticker shock," http://www.bayjournal.com/article.cfm?article=3281

<sup>33</sup> www.epa.gov/oig/reports/2008/20080331-08-P-0120.pdf, p. 11.

http://www.epa.gov/water/speeches/9-19-07\_Water\_Infrastructure.pdf, p. 10.

Directives<sup>35</sup> have established new federal requirements for EPA. The National Response Framework and several Homeland Security Presidential Directives direct EPA to support, coordinate, or lead responses to incidents of national significance, to include certain types of terrorist attacks or natural disaster events. EPA established its first Homeland Security office in 2003.

EPA needs to ensure it is ready to meet its Homeland Security requirements. The Agency must develop incident scenario plans that identify resources needed, planning assumptions, and accountable EPA entities. In addition, Agency plans need to be coordinated and communicated among all participating EPA entities as well as with outside federal, State, or local agencies that may be responding alongside EPA to nationally significant incidents. Reports issued by the Office of Inspector General since 2003 have identified a number of concerns with EPA's Homeland Security-related planning efforts and actions. Recent reports<sup>37</sup> indicate that EPA's plan for responding to incidents of national significance (1) has undocumented assumptions and unsupported resource requirements; (2) was developed with little internal or external coordination; (3) is missing key accountability designations or process descriptions for handling crisis communications; (4) has not met milestones for completing certain critical Homeland Security responsibilities; and (5) has not established accountable entities in EPA, with proper authority, to complete certain critical Homeland Security requirements.

Based on our concerns in this area, since 2004, we have identified Homeland Security as an EPA management challenge.<sup>38</sup> Prior to 2004, we identified our concerns in this area under the "protection of critical infrastructure" management challenge.<sup>39</sup> Since FY 2005, EPA has identified its efforts in support

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Planning, EPA OIG Report No. 08-P-0055, January 9, 2008.

Exit Memorandum for Preliminary Research of the Effectiveness of EPA's Emergency Response Activities, EPA OIG Report No. 2006-M-000004, February 24, 2006; EPA Needs to Better Implement Plan for Protecting Critical Infrastructure and Key Resources Used to Respond to Terrorist Attacks and Disasters, EPA OIG Report No. 2006-P-00022, April 26, 2006; EPA Should Continue to Improve Its National Emergency Response Planning, EPA OIG Report No. 08-P-0055, January 9, 2008; and OIG Assignment No.2008-115 (ongoing).

<sup>&</sup>lt;sup>35</sup> See, http://www.dhs.gov/xprepresp/committees/editorial 0566.shtm

<sup>&</sup>lt;sup>36</sup> EPA Needs a Better Strategy to Measure Changes in the Security of the Nation's Water Infrastructure, EPA OIG Report No. 2003-M-00016, September 11, 2003; EPA Needs to Assess the Quality of Vulnerability Assessments Related to the Security of the Nation's Water Supply, EPA OIG Report No. 2003-M-00013, September 24, 2003; Decline In EPA Particulate Matter Methods Development Activities May Hamper Timely Achievement of Program Goals, EPA OIG Report No. 2003-P-00016, September 30, 2003; Survey Results on Information Used by Water Utilities to Conduct Vulnerability Assessments, EPA OIG Report No. 2004-M-0001, January 20, 2004; EPA's Homeland Security Role to Protect Air from Terrorist Threats Needs to be Better Defined, EPA OIG Report No. 2004-M-000005, February 20, 2004; EPA Needs to Better Manage Counter Terrorism/Emergency Response Equipment, EPA OIG Report No. 2004-P-00011, March 29, 2004; EPA's Final Water Security Research and Technical Support Action Plan May Be Strengthened Through Access to Vulnerability Assessments, EPA OIG Report No. 2004-P-00023, July 1, 2004; EPA Needs to Determine What Barriers Prevent Water Systems from Securing Known Supervisory Control and Data Acquisition (SCADA) Vulnerabilities, EPA OIG Report No. 2005-P-00002, January 6, 2005; EPA Needs to Fulfill Its Designated Responsibilities to Ensure Effective BioWatch Program, EPA OIG Report No. 2005-P-00012, March 23, 2005; EPA Needs to Better Implement Plan for Protecting Critical Infrastructure and Key Resources Used to Respond to Terrorist Attacks and Disasters, EPA OIG Report No. 2006-P-00022, April 26, 2006; and EPA Should Continue to Improve Its National Emergency Response

<sup>38</sup> http://www.epa.gov/oig/reports/challenges.htm, 2004-2007 EPA Management Challenges.

http://www.epa.gov/oig/reports/challenges.htm, 2001-2003 EPA Management Challenges.

of Homeland Security as an Agency-level weakness<sup>40</sup> and is currently taking action to strengthen this area, such as by: (1) expanding Homeland Security planning coordination efforts with other federal, State, or local agencies; (2) recognizing a more complete range of issues and information that must be considered when developing response plans for incidents of national significance; (3) developing crisis communication plans and identifying responsible parties and roles for crisis communications; and (4) completing basic Homeland Security requirements.

In its FY 2006 Performance and Accountability Report, EPA said that it planned to close its Homeland Security management challenge by FY 2008. 41 In addition, in its FY 2007 Performance and Accountability Report, EPA said it planned to correct certain other concerns we raised by FY 2008. 42 Because many ongoing actions are not yet completed or to a point where their effectiveness can be measured, additional time is needed to determine whether the actions will be effective in addressing EPA's Homeland Security challenges.

The OIG plans to continue to monitor and report on EPA's progress in managing its Homeland Security challenges. Completion of the ongoing actions will help the Agency continue on a path toward better management of the significant challenges posed by its Homeland Security responsibilities. However, the challenge of planning and preparing for incidents of national significance, including the potential for multiple terrorist attacks, will not end with completing ongoing actions. While EPA has extensive experience in managing emergency responses, it is usually the lead or only responder. The lessons learned from past emergencies are ingrained in EPA's approach to planning for nationally significant events. The expansion of the Agency's current Homeland Security responsibilities will generally require different thinking about how to respond, coordinate with others, and communicate in nationally significant emergencies. In addition to the physical and resource challenges, EPA will also have to change how its managers think about emergency response. EPA will have to expand its emergency planning process to include more internal organizations, as well as external organizations. Previously uninvolved EPA components will have to accept responsibility for planning and coordinating support to emergency response. These internal and external lines of communication and coordination will have to be confirmed and tested to maintain a credible capability outside normal practice.

# **Oversight of Delegations to States**

EPA's oversight of State programs requires improvement. GAO<sup>43</sup> and OIG<sup>44</sup> have reported that EPA has made some progress in this area. However, there are a number of factors and practices that reduce the effectiveness of Agency oversight. Key among these are limitations in the availability, quality, and robustness of program implementation and effectiveness data, and limited Agency resources to independently obtain such data. Differences between State and federal policies, interpretations, and priorities make effective oversight a challenge.

EPA's mission is to protect human health and the environment. To accomplish its mission, EPA develops regulations and establishes programs that implement environmental laws. These programs may be

<sup>40</sup> http://www.epa.gov/ocfo/par/2005par/par05key\_mgmt\_challenges.pdf, electronic p. 5; http://www.epa.gov/ocfo/par/2006par/par06mgmt\_accomplishments\_and\_challenges.pdf, electronic p. 8; and http://www.epa.gov/ocfo/par/2007par/par07management\_weaknesses.pdf, electronic p. 5.

http://www.epa.gov/ocfo/par/2006par/par06mgmt\_accomplishments\_and\_challenges.pdf, electronic p. 8. <a href="http://www.epa.gov/ocfo/par/2007par/par07management">http://www.epa.gov/ocfo/par/2007par/par07management</a> weaknesses.pdf, electronic p. 5.

<sup>43</sup> EPA-State Enforcement Partnership Has Improved, But EPA's Oversight Needs Further Improvement, GAO -07-883, July 31, 2007

<sup>&</sup>lt;sup>44</sup> Despite Progress, EPA Needs to Improve Oversight of Wastewater Upgrades in the Chesapeake Bay Watershed, EPA OIG Report No. 08-P-0049, January 8, 2008

delegated to State, local, and tribal agencies that request to take primacy of the program. Delegation, however, does not relieve EPA of its statutory and trust responsibilities for protecting human health and the environment. EPA performs oversight of State, local, and tribal programs in an effort to provide reasonable assurance that delegated programs are achieving their goals. In addition to regulatory programs, EPA sponsors voluntary partnerships and programs with more than 10,000 industries, businesses, nonprofit organizations, and State and local governments on more than 40 pollution prevention programs and energy conservation efforts. Dealing with partners requires different types of management approaches and controls than when dealing with parties that require oversight. EPA does not have the resources to effectively administer all its responsibilities directly. EPA relies heavily on local, State, and tribal agencies for compliance and enforcement and to obtain performance data. In the 2007 *Performance and Accountability Report*, EPA states it delegated the responsibility for issuing permits and for monitoring and enforcing compliance to the States and tribes.

A critical management challenge to EPA is oversight of its delegations to the States. Federal environmental statutes grant EPA a significant role in implementing the intent of the law, and also authorize a substantial role for States. Federal intent is to give all citizens an equal level of environmental protection. However, quality data are often lacking to ensure that the intent of the law is met. For example, EPA lacks the data necessary to assess the benefits of its air toxics standards, such as decreased incidence of cancer. Data on the program's effectiveness, such as changes in emissions, concentrations of air toxics in the (ambient) outdoor air, and data on compliance with air toxics standards, are limited and inconclusive. Also, federal requirements establish consistency for businesses and within industries nationwide. State discretion adds flexibility to address specific circumstances and local issues. Joint implementation and enforcement leads to special challenges in interpretations, strategies, and priorities.

EPA has improved its oversight by implementing the State Review Framework. This framework is a consistent approach for overseeing programs. The framework can also identify other weaknesses and improvements that can be made. GAO reported that EPA had made substantial progress in improving priority setting and enforcement planning with the States. However, GAO concluded that EPA's oversight needed further enhancement. For example, State Review Framework reviews show that EPA has limited ability to determine whether States are performing timely, appropriate enforcement, and whether penalties are applied to environmental violators in a fair and consistent manner within and among the States. <sup>47</sup> OIG found that EPA did not exercise effective enforcement oversight of facilities with National Pollutant Discharge Elimination System (NPDES) permits in significant long-term noncompliance. <sup>48</sup> The situation was also exacerbated by a lack of complete and accurate records of NPDES compliance and enforcement actions.

In other reports, the OIG has consistently noted that EPA's oversight of State activities or data needs to be improved to make accurate assessments of performance and results. For example, EPA's oversight of State vehicle inspection and maintenance programs needed improvement.<sup>49</sup> These programs represent a key pollution control strategy in urban areas. They are also a prime example of why EPA involvement is critical to address pollution issues that are not bound by State lines. The OIG reported that EPA had not

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US Environmental Protection Agency, Performance and Accountability Report Fiscal Year 2007 – Environmental Progress, November 13, 2007
 EPA Should Improve the Management of Its Air Toxics Program, GAO-06-669, June 23, 2006

<sup>&</sup>lt;sup>47</sup> EPA-State Enforcement Partnership Has Improved, But EPA's Oversight Needs Further Improvement, GAO-07-883. July 31. 2007

<sup>&</sup>lt;sup>48</sup> Better Enforcement Oversight Needed for Major Facilities With Water Discharge Permits in Long-Term Significant Noncompliance, EPA OIG Report No. 2007-P-00023, May 14, 2007

<sup>&</sup>lt;sup>49</sup> EPA's Oversight of the Vehicle Inspection and Maintenance Program Needs Improvement, EPA OIG Report No. 2007-P-00001, October 5, 2006

ensured that States were meeting program commitments. Overall, EPA did not have a reasonable assurance that emissions claimed by some inspection and maintenance programs had been achieved.

In our view, while EPA has improved its oversight of delegated programs, the issues are complex and changeable. To provide effective oversight, the Agency must address the limitations in the availability, quality, and robustness of program implementation and effectiveness data. Effective oversight of delegations to States is a continuous management challenge that requires an agile organization, accurate data, and consistent interpretations of policy.

# **Chesapeake Bay Program**

The Chesapeake Bay is North America's largest and most biologically diverse estuary. Improving water quality is the most critical element in the overall protection and restoration of the Chesapeake Bay and its tributaries, according to the Chesapeake Bay 2000 Agreement. Yet after about 20 years of effort by federal, State, and local governments, the Bay waters remain degraded and the latest targeted cleanup goal will not be met. After a series of reports, the OIG has determined that while EPA could increase its use of some authorities and improve oversight, this is not nearly sufficient for achieving and sustaining water quality goals. PA quite simply does not have the resources, tools, or authorities to ensure that the Chesapeake Bay Program is successful. Changes in national farm policy, local land development decisions, and individual life styles could have huge impacts on the amount of pollution being discharged to the Bay.

Congress designated EPA's Chesapeake Bay Program Office (CBPO) with the responsibility to coordinate cleanup efforts with other federal agencies and State and local governments.<sup>52</sup> The CBPO was also given the responsibility to report to Congress on the progress in cleaning up the Bay. Congress provides a much higher level of funding to CBPO than it does for any other geographically-based program. The 2009 budget requests \$29 million for CBPO.<sup>53</sup> With this money, the CBPO awards grants and offers various technical information and assistance. Congress' interest in the Bay is also exhibited in its proposed funding of projects in the Farm Bill.<sup>54</sup>

As the most mature watershed restoration program, successful approaches and solutions for organizing and managing cleanup will therefore be highly relevant to stakeholders in other watersheds throughout the nation. Success or failure will resonate in communities across the country. The Bay's problems are national problems. The CBPO can be the prototype for developing ways to address the water quality impairments of other watersheds. Learning from the Bay's successes and failures will be critical to watersheds across the country. The most important water quality issues (nutrient overloading, habitat loss,

<sup>&</sup>lt;sup>50</sup> Chesapeake 2000, p. 1, http://www.chesapeakebay.net/pubs/chesapeake2000agreement.pdf

Saving the Chesapeake Bay Watershed Requires Better Coordination of Environmental and Agricultural Resources, EPA OIG Report No. 2007-P-00004, November 20, 2006; EPA Relying on Existing Clean Air Act Regulations to Reduce Atmospheric Deposition to the Chesapeake Bay and its Watershed, EPA OIG Report No. 2007-P-00009, February 28, 2007; Development Growth Outpacing Progress in Watershed Efforts to Restore the Chesapeake Bay, EPA OIG Report No. 2007-P-00031, September 10, 2007; and Despite Progress, EPA Needs to Improve Oversight of Wastewater Upgrades in the Chesapeake Bay Watershed, EPA OIG Report No. 08-P-0049, January 8, 2008.

<sup>&</sup>lt;sup>52</sup> Section 117 of the Clean Water Act.

<sup>&</sup>lt;sup>53</sup> FY 2009 EPA Budget in Brief, page D-4, http://www.epa.gov/ocfo/budget/2009/Final%2009%20BIB%20.pdf

<sup>&</sup>lt;sup>54</sup> USDA 2007 Farm Bill Proposals, http://www.usda.gov/documents/07finalfbp.pdf

and decline in fish populations) faced by the Bay are the same issues the other 28 estuaries in EPA's National Estuary Program face. <sup>55</sup>

EPA's CBPO has provided scientific information used by the partnership in setting allocations, revising water quality standards, and establishing stricter wastewater treatment discharge limits. Despite these important accomplishments, the Bay partners face significant obstacles in achieving the Bay's water quality goals. It is now widely acknowledged that the nutrient and sediment reductions that are required will not be met by 2010 as planned. EPA did not meet its strategic plan goals for the Chesapeake Bay in 2005 and 2006.<sup>56</sup> At the current rate of progress, it will take decades for the Bay partners to reach their reduction goals, and that is without factoring in future challenges.

The Bay partners face the following key challenges: (1) managing land development, (2) increasing implementation of agricultural conservation practices, (3) monitoring and expediting the installation of nutrient removal technology at wastewater treatment plants, (4) seeking greater reductions in air emissions, and (5) identifying consistent and sustained funding sources to support tributary strategy implementation. Few of these steps can be taken by EPA; its "partners" will need to implement practices to reduce loads. However, EPA will need to institute management controls to ensure that the promised reductions are realistic, and those that are claimed are actually being achieved.

Actions necessary to address the above challenges will not be easily implemented even if such practices are described as cost-effective. For example, it will be difficult to convince enough agricultural producers that conservation practices will not adversely affect productivity. In many cases, EPA has no clear authority to control the major sources of pollution, such as from land development. Other practices are controversial because they place restrictions on the lives of the residents of the Bay watershed. Controls may result in property owners near the coast not being able to construct additions to their homes or develop vacant land. However, to address these challenges, EPA and its partners will need to make major program improvements. In the absence of significant steps from government, financial incentives, or other mechanisms of influence, the enormous reductions required will not be forthcoming.

The CBPO has begun responding to the recommendations contained in reports by the EPA OIG and GAO by improving program management and strategic planning. While these efforts are likely to improve overall management, they are unlikely to result in the accelerated progress needed to achieve the reduction goals. It will still be up to local governments to determine how they will develop lands and to other federal agencies on how they will direct agricultural production or transportation. It is the Bay community's responsibility to take action to ensure that Bay-wide commitments are met, and that water quality goals are achieved and maintained. It is EPA's responsibility to monitor and assess progress. The Bay partners need to commit to implementation plans with realistic timeframes and generate adequate financial support. EPA should then use its reporting responsibilities to advise Congress and the Chesapeake Bay community on the partners' progress in meeting these commitments, and identifying any funding shortfalls and other impediments that will affect progress

#### **Voluntary Programs - Update**

EPA supports and advocates for a range of voluntary programs designed to provide flexibility and novel and beneficial approaches to achieve environmental goals. The basic premise of voluntary approaches is flexible, collaborative, market-driven solutions that can deliver measurable environmental results. These

<sup>&</sup>lt;sup>55</sup> Challenges Facing Our Estuaries, Key Management Issues, http://www.epa.gov/owow/estuaries/about3.htm.

<sup>&</sup>lt;sup>56</sup> Fiscal Year 2006 Performance and Accountability Report, U.S. Environmental Protection Agency, p. 176 <a href="http://www.epa.gov/ocfo/par/2006par/index.htm">http://www.epa.gov/ocfo/par/2006par/index.htm</a>

programs primarily work with business, community, or other partners to either reduce pollution below regulatory requirements, or ameliorate environmental problems not otherwise regulated by EPA (e.g., water and energy use, recycling).<sup>57</sup> In 2002, EPA released an innovation strategy that described EPA activities and priority issues.<sup>58</sup>

Voluntary programs have proliferated in recent years and now address a wide variety of environmental challenges. However, their growth has not been matched by appropriate organization and oversight. Recent OIG work illustrates that EPA does not have Agency-wide policies that require the inclusion of key evaluative elements such as standardized management processes, consistent and reliable data, and uniform operational guidelines that allow for comparative assessment. EPA has not developed specific definitions that help EPA staff to categorize or identify these diverse voluntary programs. Finally, EPA has not implemented a systematic process to develop, test, and market voluntary programs, or to regularly evaluate the effectiveness of these programs. As a result, EPA cannot identify a consistent population of voluntary programs, there are no policies requiring voluntary programs to have comparative programmatic elements, and there is no systematic process in place to regularly assess the effectiveness of these programs. In response, the Agency committed to a series of steps intended to establish minimum design standards, improve management, and develop multi-year internal program evaluation plans for voluntary programs as part of the Agency's strategic and annual planning, budgeting, and accountability systems.

Evaluations of individual voluntary programs continue to uncover design, data, and implementation concerns. For example, we found shortcomings in EPA's "gold standard" Performance Track voluntary program with quality controls, performance measurement, and strategic planning. In response, EPA committed to develop better goals and measures, improve monitoring, explore alternative performance data collection methods, and develop a comprehensive strategic plan. Our evaluation of EPA's largest voluntary program, ENERGY STAR, found that EPA does not have reasonable assurance that its self-certification process is effective. EPA relies on some alternative verification mechanisms, but lacks any quality assurance or review of reported results. The Agency's verification testing lacks a clear documented methodology governing products selected for verification tests and does not test for statistically valid results. Consequently, product efficiency and energy savings reported by manufacturers are, for the most part, unverified by EPA review. In response, EPA committed to establish a Quality Assurance Program integrating the various elements of its compliance monitoring system for ENERGY STAR-qualified products.

Clearly, EPA must be innovative and flexible, and adapt to changes in environmental protection, to continue progress toward environmental goals. The challenge is to maintain those vital elements of the existing system, such as the standards, permits, and compliance assurance efforts that are part of EPA's basic mandate, while simultaneously pursuing creative new tools and approaches that complement and enhance the Agency's efficiency and effectiveness. However, as the EPA OIG continues to evaluate the efficiency and effectiveness of voluntary programs, such as ENERGY STAR, Indoor Radon, and those

To submit comments or questions on the FY 2008 PAR, please e-mail: octoinfo@epa.gov.

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<sup>&</sup>lt;sup>57</sup> EPA Everyday Choices: Opportunities for Environmental Stewardship, December 2005.

EPA Innovating for Better Environmental Results: A Strategy to Guide the Next Generation of Innovation at EPA,
 April 2002.
 Partnership Programs May Expand EPA's Influence, EPA OIG Report No. 2007-P-00003, November

Partnership Programs May Expand EPA's Influence, EPA OIG Report No. 2007-P-00003, November 14, 2006

Voluntary Programs Could Benefit from Internal Policy Controls and a Systematic Management Approach, EPA OIG Report No. 2007-P-00041, September 25, 2007

<sup>&</sup>lt;sup>61</sup> Performance Track Could Improve Program Design and Management to Ensure Value, EPA OIG Report No. 2007-P-00013, March 29, 2007

<sup>&</sup>lt;sup>62</sup> ENERGY STAR Program Can Strengthen Controls Protecting the Integrity of the Label, EPA OIG Report No. 2007-P-00028, August 1, 2007.

esigned to reduce greenhouse gas emissions, it is increasingly a concern that the potential benefits of coluntary programs are not commensurate with the size of the environmental and human health problem ey are intended to solve.	ıs

# **EPA's Response to Office of Inspector General Identified Management Challenges**

#### Threat and Risk Assessment

Agency Response: EPA appreciates the Office of Inspector General's concerns and recommendation that the Agency enhance its efforts to periodically assess and prioritize threats to human health and the environment across media and use this information to inform its strategic planning and budgeting processes. As the Office of Inspector General points out, nearly 20 years ago EPA's Science Advisory Board (SAB) recommended that EPA target its efforts based on opportunities for the greatest risk reduction. The Board's 1990 report, Reducing Risk: Setting Priorities and Strategies for Environmental Protection, described the "fragmentary nature of EPA's approach" to addressing environmental problems due to a number of underlying conditions, including environmental laws that are focused on a single medium or threat, the Agency's responsibilities for addressing separate legislative mandates, and technologies that are targeted to address specific pollutant sources.

Given these conditions and EPA programs' disparate and individual interests and responsibilities, forging a cross-media, cross-Agency approach to assessing risk and using the information to establish risk-based priorities for planning and resource allocation represents a significant challenge. In principle, however EPA concurs with the Office of Inspector General's view that, given the diminishing resources available for environmental protection, there is a critical need for EPA to focus on high-priority environmental threats to human health and the environment across media to ensure that the Agency's actions are designed to reduce total risk in the most efficient manner. Over the coming months, EPA will conduct further discussions with senior leadership and policy-makers from across the Agency to initiate the development of an integrated risk-based strategy and appropriate metrics to measure the aggregate impacts of risk reduction to human health and ecosystems. EPA will consult with the Science Advisory Board as necessary in developing this integrated risk-based approach. The Agency will also continue to consult with the Office of Inspector General and to provide information on its progress.

### EPA's Organization and Infrastructure

Agency Response: EPA acknowledges the Office of Inspector General's concerns and agrees that the Agency could benefit from a comprehensive review of its organizational structure as it relates to the number and location of employees needed to effectively accomplish its mission. While EPA does not have the resources or the authority to conduct such a broad review, it has conducted periodic nationwide assessments to identify cost-saving opportunities as a result of mission and personnel changes.

EPA maintains an inventory of buildings—owned and leased—that support its current mission. While some employees are located in "special use spaces," the vast majority of employees are located in Headquarters buildings, regional offices, and laboratories. The "special use spaces" are rent-free in many instances and generally used by enforcement personnel who must work in concert with and proximate to state and local enforcement offices. The Agency requires all program and regional senior management officials to provide, in writing, space requirements and any requests for additional space, facility construction, repair, and alterations.

Under the Space Consolidation and Rent Avoidance Project, the Agency has released approximately 195,000 square feet of space, resulting in an annual rent avoidance of more than \$6.5 million. The Agency plans to release approximately 86,000 square feet of additional space in regional facilities for an estimated annual rent avoidance of nearly \$2 million. Through its

master space planning process, the Agency will continue to identify and fulfill its long-term facility requirements.

#### Performance Measurement

Agency Response: While measuring environmental performance is inherently challenging, EPA has made performance measurement improvement and performance management a priority and is pursuing many actions to meet this challenge. The Agency has undertaken significant work to strengthen its performance management framework and has made significant progress. EPA's work to strengthen performance management contributed to the Agency's winning the President's Quality Award for Management Excellence. EPA is the second federal agency to receive this award.

EPA's Office of the Chief Financial Officer has conducted an annual performance measures review for each of the last two years. This effort has included better aligning EPA's operational measures with its annual budget measures and strategic plan measures. EPA established an Agency-wide Deputy Regional Administrator and Deputy Assistant Administrator Performance Management Council to discuss and improve EPA's performance management practices. Additionally, EPA developed and submitted the Agency's Implementation Plan for Executive Order 13450 on Improving Government Program Performance. The Office of Management and Budget lauded EPA's plan as a model for other agencies. The Agency also established a senior staff Performance Management Workgroup to improve performance measures and address key issues at the staff level on an ongoing basis. EPA continued implementing and improving its quarterly management report and developed "measures central"—a centralized database of the Agency's key performance measures. Regional priorities have been added to the system, and the Agency piloted an effort among national program offices to "map" the relationships among key sets of measures. Staff has identified lessons learned to assist in future streamlining and aligning measures.

Other EPA offices have also led significant efforts to improve performance management practices. The Office of Policy, Economics, and Innovation (OPEI) led regular progress meetings between regional offices, Headquarters offices, and the Deputy Administrator on key measures. The Office of Policy, Economics, and Innovation's National Center for Environmental Innovation runs regular trainings for EPA staff and managers on the logic of program design, including specific training in logic modeling and program evaluation. The National Center for Environmental Innovation offers detailed courses for staff and a primer for managers.

In 2007, the Office of Research and Development initiated a study with the National Academy of Sciences (NAS) to assist EPA and other agencies in addressing the common challenge of evaluating efficiency in research. The NAS study provided precedent-setting information that will allow research programs throughout the government to reassess how they measure efficiency.

EPA's plans to continue addressing the performance measurement challenge include:

- Conducting an annual review of FY 2010 measures, focused on improving the links between EPA's operational measures, senior management priorities, and long-term environmental and health goals.
- Strengthening efforts to govern/oversee the overall quality of the measures and data in the measures central system.

- Developing a comprehensive strategy to address barriers to program evaluation (National Center for Environmental Innovation).
- Revising the Office of Enforcement and Compliance Assurance's approach to strategic
  planning for EPA's FY 2009–2014 plan. The Office is moving from a tool-based approach to
  an environmental-problem-based approach.
- Continuing to improve the performance measures used for state grants to increase transparency and accountability of state contributions to achieving EPA's mission.

#### Water and Wastewater Infrastructure

Agency Response: EPA is doing everything possible within its authority, responsibility, and resource constraints to change the way the country views, values, manages, and uses its drinking water and wastewater infrastructure. The Sustainable Infrastructure initiative continues to be a top priority and has been extremely active in the past year. While ultimately long-term sustainability will occur at the local level, EPA has provided and continues to provide national leadership. For example, the Agency has partnered with six of the major water and wastewater professional associations to reach national consensus on the 10 "Attributes of an Effectively Managed Utility." This first-of-a-kind national collaboration will enable utilities to operate under a common management framework that will help the sector move toward sustainability in a unified manner. Recently, this collaboration has resulted in a primer to help utilities assess their operations based on the "Attributes," focus on their most critical challenges, and set measurable performance goals. The primer is accompanied by an online tool kit that identifies other sources that can help utilities manage in a sustainable manner.

Recognizing that water efficiency has significant implications for infrastructure and how the Agency values water, EPA has been actively expanding the WaterSense Program, launched in 2006. The WaterSense label will help consumers find products and services that save water while ensuring performance, thereby reducing the burden on infrastructure and mitigating water availability challenges. It also helps to build a national consciousness of the value of water and water services, which will be essential to the national awareness and commitment that will be required to pay for infrastructure needs.

Additionally, EPA has reached out to other federal agencies and departments to work together on infrastructure sustainability. EPA is working with the Department of Transportation on a set of case studies on asset management, an area of common interest for water and highway infrastructure. The Department of Transportation and EPA have agreed to establish a full-time liaison position to facilitate further collaboration. Last year, EPA partnered with the Department of Agriculture on the National Paying for Sustainable Water Infrastructure conference and continues to collaborate with the Department and its funding programs. EPA has discussed water infrastructure with the Army Corps of Engineers and recently shared with them its Special Appropriations Act Project guidance, which includes a section on how to incorporate sustainable practices in earmark projects.

EPA believes it has taken and will continue to take effective steps to define and pursue its role in ensuring that the nation's drinking water and wastewater infrastructure is sustainable in the future and in increasing public awareness and appreciation of the need for sustainable water infrastructure. Expanding EPA's role will require increased authority and resources.

# Meeting Homeland Security Requirements

Agency Response: In FY 2006, EPA acknowledged homeland security as an Agency weakness in response to concerns raised by the Office of Inspector General. Over the years, EPA has taken action to strengthen its responsibility for homeland security by expanding its homeland security planning and coordination efforts with other federal, state, and local agencies; recognizing a more complete range of issues and information that must be considered in the development of response plans for incidents of national significance; developing a crisis communication plan and identifying responsible parties and roles for crisis communications; and fulfilling basic homeland security requirements.

To respond to growing demands from new Homeland Security Presidential Directives and the increasing complexity of its contribution to homeland security, EPA established the Homeland Security Collaborative Network to coordinate and directly address high-priority, cross-Agency technical and policy issues related to day-to-day homeland security policies and activities.

To improve its processes for identifying, obtaining, maintaining, and tracking response equipment necessary for nationally significant incidents, EPA created and convened the Homeland Security Policy Coordinating Committee (PCC). This executive committee, activated after a homeland-security-related attack, brings together the Agency's senior political leadership to provide policy direction to responders.

In FY 2008, EPA revised the Homeland Security Priority Work Plan (2008–2010), the Agency's overarching planning framework for identifying and aligning cross-Agency homeland security programs with EPA's highest homeland security priorities. The Plan identifies Presidential and other externally driven homeland security mandates and outlines EPA's continuing efforts to advance the Agency to the next level of preparedness.

EPA has been called on to respond to five major disasters and nationally significant incidents in the past seven years: the 9/11 terrorist attacks, the anthrax terrorist incidents, the Columbia Shuttle disaster and recovery efforts, the ricin incident on Capitol Hill, and the Gulf Coast hurricanes. These responses have reinforced the importance of a continued focus on improving the Agency's environmental homeland security focal areas: detection, prevention, and mitigation and field preparedness and response. Within these areas, EPA identified and continues to focus on four homeland security priorities: water security, decontamination, emergency response, and internal preparedness. These priority areas have been identified as the result of external entities assigning EPA specific responsibilities or through homeland security requirements and assignments.

Additionally, EPA developed three tiers of information to be responsive to its homeland security mandates. This information forms the basis for understanding EPA's highest homeland security priorities and serves as a way to assess short-, medium-, and long-term goals and results. The three tiers are:

- **Desired end states.** These describe the final outcomes of homeland security projects or efforts once EPA believes it has met the President's or other externally imposed directives (e.g., Homeland Security Presidential Directives).
- **Desired results.** These reflect specific programmatic areas through which EPA seeks to make progress toward the desired end state.

 Action items. EPA's FY 2008–2010 action items reflect specific program and regional office plans (e.g., projects or efforts) to progress toward desired results and ultimately reach EPA's desired end state.

EPA will continue to use its Homeland Security Priority Work Plan as a systematic method to assess homeland security priorities and projects annually. Additionally, the Agency will rely on audits and evaluations conducted by the Office of Inspector General to help ensure that it achieves its homeland security objectives and that its appropriations supporting homeland security are spent efficiently and effectively. **EPA has completed all corrective actions associated with this weakness.** 

# Oversight of Delegations of States

Agency Response: EPA agrees with the Office of Inspector General that the Agency has made progress in its oversight of delegated programs, and it intends to continue this progress through a variety of ongoing initiatives. As the Office of Inspector General notes, state oversight is a very complex and changeable arena. Through federal statute, implementing regulations, and program design, states are allowed flexibility in how they manage and implement environmental programs. This flexibility is critical for individual states to meet the broad range of environmental challenges and set priorities to deal with them.

Led by the Deputy Administrator, EPA is devoting significant attention to improving its performance management and accountability systems for Agency programs, including those delegated to the states. Several of these efforts are aimed at improving data and performance measures to better assess program progress nationally. Through the Environmental Council of the States (ECOS), state environmental commissioners, who are responsible for implementing delegated programs, annually participate in developing EPA's strategic plan and national program guidance. For the last three budget cycles, council officers have participated in the Agency's budget hearings with the Deputy Administrator and Chief Financial Officer. For the budget hearings, states provide information about state priorities, respond to Agency questions about program priorities and funding needs, and submit state budget proposals for the state and tribal categorical grant programs.

National program consistency and accountability depend on the work that EPA regions do with states to ensure that national program goals are met through negotiated EPA/state agreements and grants. National program managers and EPA's Office of the Chief Financial Officer work closely with the states in planning, budgeting, and accountability processes to ensure better alignment of program goals, objectives, and measures of effectiveness at the state level. Each year, states, regions, and national program managers review existing program progress measures and make recommendations for improving individual measures, aligning their measures, and where appropriate, reducing/eliminating unnecessary measures. The focus is on ensuring that the measures are meaningful ways to measure program progress.

The most recent example is the State Review Framework, developed jointly by EPA and the states, which governs program evaluations conducted by EPA's Office of Enforcement and Compliance Assurance. The principal goal of the Framework is to ensure national consistency in how the states carry out and enforce air, water, and waste programs.

EPA program offices are responsible for state oversight of individual programs; however, the Office of Congressional and Intergovernmental Relations participates in joint workgroups, such as the State Review Framework Workgroup, to remove barriers to collaborative problem

solving. The Office supports outreach and consultation with the states through national associations, particularly the Environmental Council of the States. EPA works with the Council to ensure that consultation with the states occurs early in the development of regulations, policy, and guidance, and that the consultation that takes place is timely, meaningful, appropriate, and facilitates the goal of protection of human health and the environment.

Currently, the Office of Congressional and Intergovernmental Relations is participating in a number of areas to improve the EPA-state relationships. Many of these areas involve improving data, performance measurement, and accountability.

- EPA is working on a uniform state grant workplan in response to Office of Management and Budget concerns and has developed a common set of environmental measures that it requires be included in all state grant workplans.
- EPA will continue to utilize performance measurement and accountability analyses, using information from completed Agency Government Performance and Results Act (GPRA) and Program Assessment Rating Tool (PART) reviews.
- The Office of Environmental Information is working with states to have them adopt data standards for national program databases and to develop new applications for the National Environmental Information Exchange Network.
- EPA is making expanded use of business process improvement techniques and burden reduction projects to eliminate waste and duplication in EPA and state work to enable "doing the right things, the right way," reducing reporting burden for state programs, and allowing the redirection and redeployment of scarce resources to maximize program accountability.
- The Agency is enhancing its consultation with the states in developing regulations to ensure
  that final rules can be implemented effectively. The Office of Congressional and
  Intergovernmental Relations is also participating in a special project to revise EPA's
  guidance governing economic analyses for the cost of rules to include better estimates of
  the costs to the states for implementation.

The Agency is committed to pursuing these improvements.

#### Chesapeake Bay Program

Agency Response: The Office of Inspector General continues to raise concerns about EPA's Chesapeake Bay Program. Between 2005 and 2008, the Office of Inspector General issued several evaluation reports on the Program, the majority focusing on EPA's efforts to reduce nutrients and sediment loads from the principal source sectors in the Chesapeake Bay. EPA believes that actions taken to date and those planned in the future adequately address the concerns the Office of Inspector General expressed in their reports.

In a May 2008 report to Congress, *Strengthening the Management, Coordination and Accountability of the Chesapeake Bay Program,* EPA described Chesapeake Bay Program partners' collective efforts to implement Government Accountability Office recommendations. This report provides documentation and evidence demonstrating how these recommendations have been implemented and will support enhanced coordination, collaboration, and accountability among the Program partners. In addition, it describes Program partners' progress in developing and implementing the Chesapeake Action Plan, a critical enhancement of the

Program's management system that supports implementation of the Government Accountability Office recommendations.

The Chesapeake Action Plan has four primary components:

- A strategic framework that unifies the Chesapeake Bay Program's existing planning documents and clarifies how Program partners will pursue the restoration and protection goals for the Bay and its watershed.
- An operating plan that identifies and catalogues Program partners' resources and actions being undertaken and planned.
- Dashboards, which are high-level summaries of key information, including clear status of progress, realistic annual targets toward certain Chesapeake 2000 goals, summaries of actions and funding, and critical analyses of the current strategy, challenges, and future emphasis.
- An adaptive management process that begins to identify how this information and analysis
  will provide critical input to determine Program partners' actions, assign emphasis, and
  establish future priorities.

These components enhance coordination among Chesapeake Bay Program partners, encourage them to continually review and improve their progress in protecting and restoring the Bay, increase the transparency of the Program's operations for partners and the public, and heighten the accountability of the Program and its partners for meeting their Bay health and restoration goals.

The Chesapeake Action Plan supports a management system that more closely aligns implementation responsibilities with the unique capabilities and missions of the Chesapeake Bay Program partners, thereby using the limited resources available to the Program partners more efficiently. The Action Plan will significantly transform the way the Program will operate.

It is important to note that Program partners have long been engaged in significant actions to advance the protection and restoration of the Chesapeake Bay. Program partners are strongly committed to achieving program goals for the Bay. The Chesapeake Action Plan has placed the Program on a course to accelerate the pace at which the partners implement actions to improve the Bay.

# IMPROPER PAYMENTS INFORMATION ACT OF 2002 REPORTING DETAILS

#### **Risk Assessments**

To implement the Improper Payments Information Act of 2002 (IPIA) requirements, the Agency reviewed and sampled disbursements made in the highest risk susceptible inventories. EPA determined that its programs did not have "significant erroneous payments," defined by the IPIA as payments exceeding \$10 million and 2.5% of program payments. Because the Clean Water and the Drinking Water State Revolving Funds (SRFs) are former Section 57 programs, EPA was required to submit an IPIA corrective action plan for them. The Agency's corrective action proposed to reduce the error rate of improper payments in the SRFs from 0.51 percent to 0.30 percent over a five-year period. Since the end of FY 2005, EPA has continued to surpass the FY 2008 target of 0.30 percent. The error rates for these two programs were as follows:

Program: Clean Water and Drinking Water SRFs									
Fiscal Year	Outlays	<b>Erroneous Payments</b>	Error Rate						
2004	\$2.1 billion	\$10.3 million	0.49 percent						
2005	\$2.0 billion	\$ 3.0 million	0.15 percent						
2006	\$2.3 billion	\$ 3.5 million	0.15 percent						
2007	\$2.3 billion	\$1.64 million	0.07 percent						
2008	\$2.1 billion	\$8.3 million	0.39 percent						

# **Statistical Sampling Process**

Based on having low error rates and less than \$10 million in erroneous payments, OMB approved relief from annual statistical sampling and reporting requirements for the Clean Water and Drinking Water State Revolving Fund (SRF) Programs for FY 2007 – FY 2009. EPA will need to conduct a risk assessment on these programs in three years (FY 2010), or may be required to re-initiate measurement activities if there are any substantial changes to the program (legislation, funding, etc.) that may impact payment accuracy.

#### **Corrective Action Plans**

In order to meet OMB's objective, EPA initially conducted additional risk assessments by forming four subgroups with expertise in grants, contracts, payroll, and travel/purchase credit cards to review internal controls, identify and measure high risk areas, and develop corrective action plans for each subject area. Updated planned actions in each of the areas are as follows:

#### **Grants**

As described in Section II above, EPA was granted relief from annual statistical sampling of direct and subrecipient SRF payments. Since FY 2006, the Agency tracks erroneous payments by grant recipient in the Grantee Compliance Database.

During FY 2005, EPA performed an erroneous payments review for calendar year (CY) 2004 using judgmental risk-based sampling to select 267 grant recipients for administrative reviews including 111 non-profits grantees. Nineteen of the non-profit grantee reviews identified potential erroneous payments. In FY 2006, the Agency completed it risk-based judgmental CY 2005 sample of 99 non-profit recipient reports – 24 identified potential erroneous payments. In FY 2006, EPA introduced a new, random statistical sampling approach that categorizes grant recipients for review. In FY 2007, of the 60 CY 2006 statistically sampled non-profit grantee recipients reviewed, 27 were identified as having potential erroneous payments. In FY 2008, of the 60 CY 2007 statistically sampled non profit grantee recipients reviewed, 15 were identified as having potential erroneous payments. Final results for these 4 years provided in the table below.

The table below also reports updated information on the appeal process results (costs still in the recipient appeal) for these years. The Agency also reports on these results for the Improved Financial Management initiative of the President's Management Agenda.

Non-Profit Grantees Review/Audit	CY 2004	CY 2005	CY 2006	CY 2007
Results	Review	Review	Review	Review
Total dollars drawn	\$9,065,389	\$20,222,038	\$29,373,772	\$22,544,462
All potential erroneous payments cited	\$650,799	\$1,016,967	\$562,394	\$384,352
Questioned costs determined allowable	\$646,237	\$329,378	\$523,227	\$307,919
Actual erroneous payments (unallowable costs)	\$18,755	\$687,589*	\$39,167	\$13,433
Costs that have been recovered	\$18,755	\$57,791	\$6,280	\$13,433
Costs still in recipient appeal process	\$0	\$0	\$0	\$0
Percent of erroneous payments	0.207 %	3.400 %	0.133 %	0.059 %

<sup>\*</sup> Of the \$687,589 in final erroneous payments identified for CY 2005, \$629,798 (or 91.6%) was associated with a single earmark award. But for this one earmark, erroneous payments for sampled granted during CY 2005 were \$57,791, equal to 0.2857% of total disbursements for sampled grants, and well below EPA's target metric of 1% of total disbursements. In response to the Agency's findings, the earmark grant has been terminated and the recipient suspended, as shown on GSA's Excluded Parties List System.

# **Contracts**

EPA continues to take appropriate action as needed to reduce or eliminate improper payments. The appropriate Contracts Officer Representatives or On Scene Coordinators are notified of all improper payment discovered. In January 2003, EPA implemented a monthly Improper Contract Payment Report. The report captures the number of improper payments per month and provides information on each improper payment including the reason and recovery status. In FY 2006, the Agency received final Recovery Audit Report – and audit reviewed 376,000 small purchase and contract payment transactions worth \$6.5 billion. The Audit Recovery contract reviewed 100,471 contract payments totaling \$4.3 million and found only 4 erroneous

payments (a 0.01 percent error rate). EPA has addressed all audit recommendations cited in the Recovery Audit Report.

Results of EPA's Improper Contract Payments Report										
Fiscal Year	Number of Erroneous Payments	Erroneous Payments (Dollars in Thousands)	Error Rate for Dollars							
2003*	25 (of 24,056)	\$206.1	0.02 percent							
2004	21 (of 24,886)	\$748.5	0.08 percent							
2005	21 (of 26,305)	\$121.5	0.01 percent							
2006	25 (of 28,098)	\$406.5	0.03 percent							
2007	14 (of 29,828)	\$65.3	0.01 percent							
2008	12 (of 32,043)	\$324.0	0.03 percent							

<sup>\*</sup> FY 2003 only included data from January through September.

Based on EPA's excellent performance and effective controls, the Agency does not plan future externally conducted recovery audits. Formal Recovery Audit have demonstrated a low rate of erroneous payments whereby making it not cost effective to conduct these external audits. The Agency continues to use a monthly Improper Contracts Payment Report as the tool for monitoring payments.

# **Commodity Payments**

Since no high risk areas have been identified, no corrective action is required. EPA continues to take appropriate action as needed to reduce or eliminate any improper payments. The commodity payments were included in the FY 2006 completed Recovery Audit described above in Section III.B. Contracts. The Recovery Audit contractor reviewed 275,185 invoices paid totaling \$2.2 million and found 31 improper payments (less than 0.01 percent error rate). The improper commodity payments were attributed to product returns not deducted, duplicate payments due to keypunch errors and vendor number errors, cash discounts not taken, and state and local tax exemptions not taken. As of January 2006, the Agency consolidated its commodity payments operation to one Finance Center. The consolidation achieves a higher degree of internal control, consistency and oversight. The consolidation plus several other corrective actions addressed the Recovery Audit Report recommendations. In preparation for replacing the core financial system, EPA reviewed the vendor file to ensure the accuracy of all vendor codes.

The Agency implemented a commodities payment tracking mechanism in January 2004 to gather improper payment data. This tracking system provides the data for a monthly Improper Commodities Payment Report which includes information on each improper payment. Given the low rate of erroneous payments, EPA does not plan future externally conducted recovery audits – a formal Recovery Audit is not cost effective for the contractor who is paid based on erroneous payments found/recovered. The Agency will continue using the monthly Improper Commodities Payment Report as the tool for monitoring these payments.

Results of EPA's Improper Commodity Payments Report										
Fiscal Year Number of Erroneous Erroneous Payments Error Rate for (Dollars in Thousands)										
2005	40 (of 42,698)	\$416.0	0.17 percent							
2006	102 (of 50,665)	\$695.5	0.23 percent							
2007	63 (of 45,859)	\$176.5	0.06 percent							

2008	48 (of 43,629)	\$215.4	0.08 percent

# **Payroll**

By December 31, 2004, the Payroll Workgroup completed a comprehensive review of internal controls and submitted recommendations to reduce improper payments. Additionally, in FY 2005, the workgroups developed a corrective action plan/best practices. EPA implemented these corrective actions before the Agency transferred the payroll disbursement function to the Department of Defense in May 2006. EPA now benefits from the combination of both agencies internal controls.

#### **Travel Card/Purchase Card**

The Agency continues to monitor the travel and purchase charge card transactions in accordance with the Agency policies and procedures. In addition, EPA monitors the issuance of purchase cards to ensure that spending limits and span of control are kept to a minimum. The Agency implemented a monitoring program that requires each of the Senior Resource Official to perform biennial reviews of the purchases made within their program offices. These reviews ensure that integrity of the purchase card program. EPA continues to use several additional controls.

- Notify card holder's approving official via email for each purchase daily;
- Conduct routine reviews on various transactions; and
- Review Agency Atypical Report which identifies airline ticket purchase without authorizations.

# Improper Payment (IP) Reduction Outlook FY 2005 - FY 2009

# (Dollars in millions)

Program	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
	2005	2005	2005	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009
	Outlays	IP%	IP \$	Outlays	IP%	IP \$	Outlays	IP%	IP \$	Outlays	IP%	IP \$	Outlays	IP%	IP \$
Clean Water and Drinking Water SRFs	\$1,963 (actual)	0.45 target 0.15 actual	\$3.0	\$2,303 (actual)	0.40 target 0.15 actual	\$3.5	\$2,344	0.35 target 0.7 actual	\$1.60	\$2,143 (est.)	0.30 target 0.39 actual	\$8.3	\$2,100 (est.)	0.30 target 0.30 est.	\$6.3 (est.)

#### **Ensuring Management Accountability**

As previously outlined in the corrective action plans, the Agency continues to strengthen already strong internal controls in key payment processes. Information on erroneous payments from reviews and audits for the two SRFs, our largest grant programs, is reported semi-annually to management in both the Office of Water and the Office of the Chief Financial Officer. In all

cases action is taken with the appropriate officials to ensure improper payments are recovered and to avoid future improper payments. Similar monitoring through reports is done for the contract and commodities payment areas.

# Information Systems and Infrastructure

The Agency's information systems are sufficient to reduce improper payments to targeted levels.

# **Statutory and Regulatory Barriers**

None.

#### **Conclusions**

EPA met all of the requirements and received a Green Status on Eliminating Improper Payments as of June 30, 2008. The Agency continues to demonstrate a low level of risk for the SRF programs through random statistical sampling of direct payments and targeted state reviews. In FY 2007, based on the guidelines contained in Appendix C to OMB Circular A-123, Part I, Section K (program has documented a minimum of two consecutive years of improper payments that are less than \$10 million annually), EPA requested and received relief from the annual statistical sampling and reporting requirements of the IPIA for the Clean Water and Drinking Water SRFs. This waiver for statistical testing of SRF transactions covers fiscal years 2007-2009. EPA will be required to resume statistical assessment and report on the SRF programs in the FY 2010 PAR. OMB's approval of the three-year waiver is contingent on no significant legislative or programmatic changes, significant funding increases and/or any change that would result in substantial program impact. If such changes occur, the Agency must reinitiate risk assessments and comply with IPIA reporting requirements if there is significant risk of improper payments occurring.

For FY 2008, EPA committed to the following activities:

- Continue to monitor commercial payments to ensure accurate characterization of monitoring efforts annually in the PAR; and
- Brief OMB, as needed, depending on program changes, legislative and/or funding revision, or anything that development from EPA's monitoring.