Supplemental Information for

SUSTAINED PROGRESS IN ADDRESSING MANAGEMENT ISSUES

(This document provides additional information for Section I - Overview and Analysis of EPA's FY 2003 Annual Report)

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SUSTAINED PROGRESS IN ADDRESSING MANAGEMENT ISSUES

The Reports Consolidations Act of 2000[1] gives Agencies the authority to consolidate various management reports and submit them as part of their annual reports. This section provides a comprehensive discussion of EPA's progress in strengthening management practices to achieve program results. It includes the strategies implemented and progress made in addressing management concerns identified under the Federal Managers Financial Integrity Act;[2] the Agency's efforts to carry out corrective actions on audits issued by EPA's Office of Inspector General (OIG); and the OIG's list of top management challenges facing the Agency.

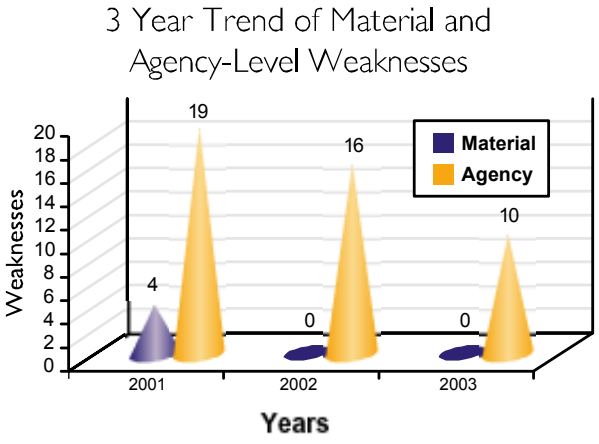
FY 2003 Integrity Act Report

Fiscal Year 2003
Annual Assurance Statement

I am pleased to give an unqualified statement of assurance that the Agency's programs and resources are protected from fraud, waste, and mismanagement, based on EPA's annual self-assessment of its internal management and financial control systems.

Marianne L. Horinko — Acting Administrator
October 23, 2003 — Date

In FY 2003, for the second year, EPA reported no material weaknesses under the Federal Managers Financial Integrity Act and resolved almost one third of its less severe, internal Agency weaknesses tracked by the Administrator (see chart). To identify management issues and monitor progress in addressing them, Agency senior leaders use a system of internal and independent reviews and program evaluations, audits by the General Accounting Office (GAO) and EPA's OIG, and performance measurement. These efforts ensure that program activities are effectively carried out in accordance with applicable laws and sound management policy, and provide reasonable assurance that Agency resources are protected against fraud, waste, abuse and mismanagement. In FY 2003 the Office of Management and Budget (OMB) recognized EPA's success in correcting material weaknesses, which contributed to the Agency achievement of a "green" status score in Improved Financial Performance, a key initiative of the President's Management Agenda.[3]



In FY 2003, EPA addressed a wide range of major management challenges, thereby strengthening its ability to achieve environmental and human health results. EPA's advancements in establishing and implementing effective management controls in environmental programs include:

- Using a comprehensive, integrated strategy to address risks from all sources of air toxics—major, area, mobile and indoor sources.[4] EPA is on target to complete all of its 10-year Maximum Achievable Control Technology (MACT) standards by February 27, 2004.[5]

- Improving water quality by reducing the backlog of National Pollutant Discharge Elimination System (NPDES) Permits[6] and increasing focus on water permit prioritization for environmental results.

- Enhancing EPA's program to prevent risk to human health or the environment from land application of sewage sludge by increasing public involvement, expanding biosolids-related research, and actively enforcing safe land-application.[7]

The Agency also addressed a number of challenges in administrative and management program areas, which provide the infrastructure supporting EPA's ability to achieve results. Following are examples of FY 2003 accomplishments toward continued improvement in effective management of resources:

- EPA is aggressively implementing a comprehensive approach to managing its grants awards, which make up slightly less than half of the Agency's budget.[8] To improve oversight for the award and administration of assistance agreements, EPA established a competition policy that in FY 2003 more than tripled the percentage of competitive awards to non-profit organizations covered by the policy. The Agency also established a new post-award monitoring policy that will significantly increase oversight and strengthen accountability for grants management.

- EPA strengthened its data management and information technology systems. During FY 2003 the Agency developed new management controls to ensure consistent quality management practices throughout EPA; launched a modernized RCRAInfo system[9] that reduces burden and provides better data; and enhanced its comprehensive information technology investment review process, which is integrated with EPA planning and budgeting.

- EPA drafted its new *Strategy for Human Capital, Investing in Our People II, 2003 through 2008*, and included a human capital cross-goal strategy in the Agency's *2003 Strategic Plan*. These efforts reflect progress in aligning workforce planning, recruitment, and staff development efforts with the Agency's environmental goals.

EPA is addressing six of its management challenges as internal weaknesses for which the Agency develops specific and measurable corrective actions and reports on progress to the Administrator. Following are brief descriptions and summaries of efforts underway to address the management challenges facing the Agency.

Challenges in Addressing the Air Toxics Regulatory/Residual Risk Program

While EPA has made substantial progress in issuing Phase 1 air toxics standards, it was more than 2 years behind in fulfilling statutory responsibilities. From FY 2001 to FY 2003, this issue has been an Integrity Act weakness, and from FY 2002 to FY 2003 an OIG management challenge.

EPA has made significant progress in correcting the Agency level weakness on *Meeting Statutory Deadlines for the Air Toxics Regulatory/Residual Risk Program*. Based on this progress, the Agency is on target to complete all of its 10-year Maximum Achievable Control Technology (MACT) standards by February 27, 2004.[10] In addition to strengthening the air toxics program to prevent further delays in issuing the MACT, EPA has developed a comprehensive, integrated air toxics program that better meets long term goals by addressing risks from all sources of toxics—major, area, mobile and indoor sources. The Agency continues to shift the emphasis of its air toxics program to a risk-based approach that addresses specific needs of the various categories of residual risk and their special handling in the Clean Air Act. EPA is developing site-specific risk assessment guidance[11] that will allow a facility to demonstrate whether the health risks it poses to the surrounding community are low enough to comply with the residual risk standards. The Agency is also continuing to analyze the risk of the remaining 2-, 4-, and 7-year MACT source categories. As part of the effort to address concerns about data gaps for toxicity and different data collection and analysis methods, EPA is also developing an efficiency measure on the cause-and-effect relationships between the air toxics program and changes in environmental conditions or cancer incidence. In addition, the Agency is strengthening its sound scientific foundation for an effective risk-based program. This year, the Science Advisory Board (SAB) completed an external review of an air toxics research strategy.[12] EPA is also working with state and local agencies in a joint Air Toxics Monitoring Steering Committee to design a national toxics monitoring network. The SAB has expressed clear support to the Agency's approach for developing this capacity through monitoring pilots carried out under the sponsorship of the joint committee. The data analysis phase of the initial assessment work, reflected in a 10-city air toxics monitoring pilot project, was completed in mid-2003.[13] Data from this effort is helping to complete the design of a network for a national air toxics characterization by early calendar year 2004. While EPA works to develop better indicators of air toxic risk reduction, it continues to effectively reduce air toxics, which since 1990 have been reduced by over 1.5 million tons per year, a 34% reduction.[14] When all the MACT rules are fully implemented, in addition to efforts by states and industry, toxic emissions from large industrial facilities will decrease by 1.7 million tons per year or 63% from 1990-1993 baseline levels.[15]

Reduce the Backlog of National Pollutant Discharge Elimination System (NPDES) Permits[16]

Expired NPDES permits might not reflect the most recent applicable effluent guidelines, water quality standards, or Total Maximum Daily Loads posing a threat to the environment. Without timely issuance of high-quality permits, necessary improvements in water quality could be delayed. From FY 2001 to FY 2003 this issue has been an Integrity Act weakness and an OIG management challenge.

EPA's strategy for improving the program has significantly reduced the backlog. 83 percent of major facilities have current permits (56 percent of the targeted reduction). 79 percent of individual minor facilities have current permits (71 percent of the targeted reduction). When facilities covered by non-storm water general permits are included in the count of minors, 83 percent have current permits (82 percent of the targeted reduction).

In addition to significantly reducing the backlog, EPA is continuing to improve permit efficiency and quality. EPA's recently revised strategy includes increased focus on: effective prioritization of permits for environmental results, stronger NPDES program integrity, and increased efficiency through permit streamlining. To prioritize permits, in FY 2003, EPA pilot tested the use of a permit prioritization checklist and is working with regions and states to finalize it. EPA is also reviewing permit data quality, increasing the percentage of permit records with locational data to better characterize the environmental impact, and modernizing PCS for anticipated implementation in 2005. To strengthen NPDES program integrity, EPA is holding regular training courses for permit writers, and working with regions and states to develop and pilot quality management tools, including Regional and state self assessments, quarterly trend reports, and state NPDES program profiles. As part of the effort to increase efficiency, the Agency is bundling lower priority permits in a streamlined process, facilitating watershed-based permitting approaches, encouraging use of general permits, and developing and distributing electronic permit application and permit writing tools. In 2003, EPA also made available, through the internet, scanned copies of major permits and fact sheets. The web-accessible permits improve access to information, provide models and improve data sharing.

Management of Biosolids

OIG raised concerns regarding the scientific studies regarding risk and the resources devoted to implementing the biosolids program. From FY 2002 to FY 2003 this issue has been an OIG management challenge.

EPA continues to meet its statutory obligations under the Clean Water Act (CWA) pertaining to sewage sludge while it addresses concerns about the adequacy of the sewage sludge rule, significantly expands biosolids-related research, and continues to actively address biosolids violations and enforce safe land-application of biosolids to prevent risk to human health or the environment. EPA set into motion an inclusive process to address concerns by establishing an

inter-Agency committee to develop a draft Agency response to National Research Council (NRC) 2002 recommendations for additional research.[17] In April 2003 EPA published its draft response in the Federal Register for public comment.[18] The draft response includes a discussion of areas proposed for additional research, and the proposed determination on identifying pollutants in biosolids that may warrant further regulation as required by §405(d)(2)(C) of the CWA. EPA is now analyzing the comments received for input to the Agency's final response to the NRC recommendations, and will announce its final response and strategy in the Federal Register in January 2004. At that time, EPA will also announce its final decision on identifying additional pollutants in biosolids that may warrant further regulation under Part 503 in a separate Federal Register Notice.

On October 17, 2003, EPA announced its final decision not to regulate dioxins in land applied sewage sludge.[19] This decision was based on the results of a peer reviewed multi-pathway risk assessment that took five years to develop and finalize. The results of this risk assessment demonstrated that the risk of new cancers from exposure to dioxins for a highly exposed population of farm families that use sewage sludge on their farms as a fertilizer and soil amendment, is small. EPA also evaluated the potential risks to wildlife from exposure to dioxins from land applied sewage sludge. The results of this evaluation indicated that there are no significant ecological impacts.

EPA is undertaking research and analyses initiatives to improve and expand its scientific understanding and management of the biosolids program. In addition, EPA has taken actions to address biosolids violations and will continue to take actions to address instances where biosolids pose an endangerment to human health or the environment. In the last seven years (FY 1995-2002), EPA has undertaken over 500 enforcement actions[20] and has conducted approximately 380 inspections over the last three years (FY 2000-2002).[21] To assist the states and regions in their oversight of the biosolids program, EPA has, either in place or in development, tools to assist and promote compliance with biosolids regulatory requirements. For example, the Agency recently developed revised guidance and training on NPDES inspections, including biosolids.[22] EPA is also continuing to work with states as it modernizes the Permit Compliance System (PCS) to allow for more effective program oversight. As part of the PCS modernization, a separate workgroup (including states and EPA) was devoted to the data needed to manage the biosolids program.[23] The anticipated implementation date for the modernized PCS is December 2005. In addition to this national system, states and facilities may choose to use the Biosolids Data Management System (BDMS) as an additional management tool.

EPA also has been working closely with the National Biosolids Partnership to develop and pilot test a voluntary system for biosolids which seeks to enhance management from pretreatment through processing and ultimate disposition. The Agency has been actively coordinating with states and regions through a cross-office Biosolids Program Implementation Team. EPA also continues to conduct state of the biosolids workshops, and, in cooperation with the U.S. Department of Agriculture and many other stakeholders, has undertaken studies to determine the extent of exposures to individuals near biosolids land-application sites.

EPA's Working Relationships with States[24]

The National Environmental Performance Partnership System (NEPPS) established EPA-state working partnerships to address complex environmental issues with scarce resources. One of the primary tools for implementing NEPPS, performance partnership grants (PPGs), allows states and Tribes to combine multiple EPA grants into one. From FY 2001 to FY 2003 this issue has been a GAO or OIG management challenge.

Under NEPPS, the Agency committed to long-term collaboration with state agencies to improve EPA and state management of national environmental programs. EPA remains committed to improved joint planning and priority setting, with the states and Performance Partnership Agreements as the vehicle to achieve this goal. In January 2003, the Performance Partnership Steering Committee (established in July 2002) hosted the first EPA/state project officers workshop. As a result of the workshop, a training course for EPA headquarters, Regional and state PPG project officers and managers was developed. The initial PPG training session for EPA Region 6 and its states was held in July 2003, and EPA will convene additional training courses for the other EPA Regional offices in the coming months. Together with EPA, the Environmental Council of the States (ECOS) established the Partnership Agreement and Grants Workgroup during their Spring 2003 meeting. This group will work closely with EPA's Performance Partnership Steering Committee to address the full range of PPA and PPG issues. EPA also organized a National Training Conference for Regional and program office NEPPS coordinators, and continued bi-annual reporting on the states' use and application of PPGs[25] to keep the states, Congress, and other stakeholders and partners informed about the status of PPGs. These activities provide a foundation for additional progress planned, and EPA is committed to continuing training, working group sessions, joint reviews, and developing and implementing a strategy to market the successes and benefits of performance partnerships. The Agency will also obtain recommendations from the Performance Partnership Grant Task Force with respect to mitigating conflicts between performance partnership principles and categorical grants guidance.

Information System Security

EPA continues to improve the management and oversight of the Agency information security program with the development and implementation of effective information security tools and processes that mitigate risks to the Agency's data and systems. From FY 2001 to FY 2003 this topic has been an Integrity Act weakness, and a GAO or OIG management challenge.

EPA has successfully demonstrated a high level of security for its information resources and environmental data. In FY 2002, the Agency developed and began implementing a comprehensive strategy to systematically address security-related deficiencies in accordance with the Government Information Security Reform Act,[26] and in FY 2003, the Agency validated the effectiveness of these corrective actions. The corrective actions include ensuring annual security self-assessments of Agency general support systems and major applications in accordance with Federal Information Security Management Act[27] and relevant OMB directives; conducting in-depth analyses of Capital Planning and Investment Control system security plans

to determine that the controls provide the anticipated protections; ensuring regular risk assessments and follow-up on major applications and general support systems; monitoring Agency networked computer servers for compliance with security standards and sending quarterly reports to senior officials summarizing their compliance status; conducting internal and external network penetration testing; and monitoring EPA's firewall and intrusion detection system to ensure security of the Agency's perimeter.

EPA plans to sustain information security improvements through consistent security control implementation, ongoing evaluation, and regular testing to ensure that the policies and procedures are effective. In FY 2004, the Agency will focus on establishing a robust quality assurance program, improving the security training program for staff with significant security responsibilities, and establishing a process to ensure that the Agency's information security practices are implemented throughout the life cycle of information technology systems.

Information Resources Management (IRM) and Data Quality/Environmental and Performance Information Management

To acquire, manage, and deliver the data the Agency needs to make decisions and monitor progress against environmental goals, EPA continues to improve how data is managed and used by providing tools and planning processes for effective data sharing, data integration, and identification of key data gaps. From FY 2001 to FY 2003 this issue has been an Integrity Act weakness and a GAO and OIG management challenge.

EPA's progress includes completion of the *EPA Strategic Information Plan, A Framework for the Future*,[28] promulgation of six Reinventing Environmental Information data standards;[29] development of the Data Architecture, a component of the Agency Enterprise Architecture (EA);[30] development of the draft *Data and Information Quality Strategic Plan;*[31] development of a second set of data standards; and improvement of data collection processes through the Central Data Exchange.[32] EPA is working with the states and Tribes, through the Environmental Data Standards Council, to develop data standards for the exchange of environmental data. To facilitate data standard implementation, EPA has established technical and business guidelines for the use of standard data elements, and is providing technical assistance. Building on the FY 2003 *Draft Report on the Environment*,[33] EPA is continuing the Environmental Indicators Initiative, a long-term effort to work with stakeholders, partners and the public to identify and fill key data gaps.

EPA continues to make progress in assuring data quality. The Agency implemented improvements to the oversight and management of the Agency requirement for Quality Management Plans, particularly the communications process. EPA conducted training for Agency staff on implementing the EPA Information Quality Guidelines.[34] Examples of specific actions to improve oversight and management of Agency laboratory quality system practices include verifying that laboratories are implementing corrective actions from recent assessments, providing training and best practices to deter improper laboratory data quality practices, and continuing the review of Quality Assurance Annual Report and Work Plans to assure they are

comprehensive and current.

Making Regulatory Innovations Successful[35]

EPA has invested considerable time and resources to "reinvent" environmental regulations within the existing statutory framework, but there is concern that EPA must address statutory obstacles in order for innovative regulatory programs to succeed. In FY 2002 and FY 2003 this issue has been a GAO major management challenge.

EPA is committed to continue testing and implementing innovative approaches to achieve environmental results. This continued commitment allows progress to occur in the near term, while gaining experience in how new legislative authority could address impediments without undermining the benefits of today's environmental statutes or sacrificing important safeguards in the Nation's environmental protection system. In FY 2003, EPA continued and enhanced its robust approach to further strengthening the Agency's ability to provide regulatory flexibility. EPA continued to work with the Environmental Council of the States to improve the EPA processes needed to create regulatory flexibility for state innovation projects. The Agency includes State Commissioners on the agenda of EPA's Innovation Action Council to provide an opportunity to discuss state innovation needs. EPA also successfully piloted a state innovation grant competition, and awarded several state grants to provide seed money to the state-initiated projects. Based on an independent evaluation of the first-year innovation competition, the Agency is expanding this state innovation funding idea, pending congressional funding approval. In the next solicitation of innovation grant proposals, EPA and the states will jointly set strategic priorities for innovation. This kind of program, and the discussion between state environmental commissioners and EPA senior leadership, can inform the legislative process, and potentially support a clearer understanding of how specific legislative provisions could be designed to overcome perceived barriers in existing statutes. EPA describes a specific strategic target for the State Innovation Grant Program in the Agency's Strategic Plan for 2003-2008 to measure improvement in environmental protection resulting from alternative approaches to environmental protection.

Human Capital Strategy Implementation/Employee Competencies

EPA recognizes the importance of placing the right people, with the appropriate skills, where they are needed. The Agency needs a systematic approach to workforce planning, supported by reliable and valid workforce data, and should focus on sustaining adequate scientific expertise. From FY 2001 to FY 2003 this issue has been an Integrity Act weakness, and a GAO and OIG management challenge.

EPA has made significant progress toward addressing this weakness and achieving the President's Management Agenda Human Capital initiative.[36] For example, the Agency has aligned its human capital planning activities with strategic planning and budgeting processes. EPA has drafted a new *Strategy for Human Capital, Investing in Our People II, 2003 through 2008* to strengthen human capital strategies already in place. EPA is now pilot testing its

National Strategic Workforce Planning System,[37] which links competencies to mission needs along major occupations, and will provide managers with a tool to inventory workforce competencies and project future needs to identify skill gaps. EPA continues to offer successful developmental programs that address the needs of all employees from administrative personnel to executive leadership. To assess the effectiveness of the Workforce Development Strategy[38] programs, the Agency is conducting several program evaluations and will make enhancements as indicated by these evaluations. These evaluations will serve as a "test bed" for an evaluation methodology that will be applied to other human capital initiatives. EPA is also providing greater support for national recruitment initiatives and is developing a coordinated approach to Agency-wide recruitment and outreach initiatives.

To ensure that the Agency's Human Capital activities support the agency mission and are in compliance with the merit system principles, EPA is drafting a Human Capital Accountability Plan. The Plan is designed around four key areas: Strategic Alignment, Program Effectiveness, Operational Efficiency and Measures of Legal Compliance. EPA's Human Capital performance measures will address Agency line managers' human resources actions, and human resources staff's adherence to procedural requirements.

Protecting Critical Infrastructure from Non-Traditional Attacks

While EPA's efforts to enhance critical infrastructure protection are commendable, EPA needs to better define expectations and develop systems to effectively measure and analyze program performance to ensure the desired state of security and achieve its goals. From FY 2002 to FY 2003 this issue has been an OIG management challenge.

EPA made significant progress in implementing the Agency's *Strategic Plan for Homeland Security*,[39] a comprehensive approach to carrying out EPA's responsibilities in responding to and recovering from acts of environmental and other terrorists attacks. In FY 2003, EPA established an Office of Homeland Security (OHS) as the lead office for implementing the *Strategic Plan for Homeland Security*, coordinating homeland security policy development across EPA, and serving as primary liaison with senior officials in the Department of Homeland Security and other Federal agencies with responsibilities for homeland security. OHS has established relationships with program and Regional offices; helped coordinate requests for information and responses to reports from the White House Homeland Security Council, Department of Homeland Security, White House Office of Management and Budget, General Accounting Office, Congress, and members of the public; and is working with the Office of Environmental Information on developing a homeland security information management system. OHS is overseeing the development of a system that will help EPA program and Regional offices manage their homeland security responsibilities, and is working with program offices to complete a number of inter- and intra-agency efforts related to critical infrastructure. OHS convened the Agency's Homeland Security Policy Coordinating Committee (PCC), and is working with the PCC to develop a list of homeland security priorities at EPA. OHS also formed a workgroup to update the Agency's Homeland Security Strategic Plan, serve as the central facilitator for multi-organizational homeland security activities within EPA, and

oversee a program evaluation of EPA's National Security Information program.

Linking Mission and Management

OIG believes that EPA has begun developing the process for linking resources to results, but needs to strengthen its ability to link costs to goals by working cooperatively with its State and Federal agency partners to develop more outcome-oriented goals and measures, and by improving Agency accounting procedures. From FY 2001 to FY 2003 this issue has been a management challenge.

EPA's sustained focus on improving the way the Agency manages for results and uses cost and performance information in decision making has resulted in government-wide recognition for the Agency's achievements in Budget and Performance Integration under the President's Management Agenda. The Agency's accomplishments in FY 2003 include the following: (1) revising EPA's strategic plan to include five outcome-oriented goals and supporting objectives and sub-objectives that have clear linkages with the work of regions, states, and tribes; (2) developing Regional Plans as a common framework for linking EPA's Regional priorities to the Agency's five strategic goals; (3) increasing the use of annual performance information and trend data in developing the FY 2005 budget; (4) releasing a *Draft Report on the Environment*[40] as part of the Agency's "environmental indicators initiative," which is intended to help assess the current state of the environment and to provide a baseline against which future performance can be measured; and (5) developing more outcome-oriented annual performance goals and measures as well as efficiency measures. In addition, in FY 2003, EPA enhanced its cost accounting capabilities and strengthened the linkages between resources and performance by developing a new accounting framework that will allow EPA to track resources across the five new goals.

OMB acknowledged EPA's significant accomplishments in these areas by providing the Agency with progress scores of "green" for Budget and Performance Integration under the President's Management Agenda in five consecutive quarters (since June 2002). In addition, during the first quarter of FY 2003, EPA was selected as a finalist for the 2002 President's Quality Award in the area of Budget and Performance Integration,[41] distinguishing the Agency government-wide. Most recently, EPA received a "green" status score for Improved Financial Performance, joining only two other Federal agencies with this distinction, in recognition of the Agency's use of financial and performance information in day-to-day program management and decision making. And finally, the Mercatus Center ranked EPA's FY 2002 Annual Performance Report 6th among 24 Federal agencies.[42] While EPA acknowledges the importance of the improvement opportunities identified by the OIG, it has made significant progress in this area, and is effectively working on further achievements.

Grants Management and Use of Assistance Agreements

EPA needs to improve oversight for the award and administration of assistance

agreements to ensure effective and efficient use of resources. From FY 2001 to FY 2003 this issue has been an EPA weakness, and a GAO, OMB or OIG management challenge.

Each fiscal year, EPA awards, on the average, slightly less than half of the Agency's budget,[43] and it is implementing a comprehensive approach to managing these grant dollars effectively and ensuring they further the Agency's mission. Specifically, in FY 2003, EPA developed the Agency's first long-term Grants Management Plan.[44] The Plan provides the framework for ensuring that EPA's grant programs meet the highest management and fiduciary standards and further the Agency's strategic program goals.

A key objective of the long-term Plan is to strengthen accountability for grants management. To that end, this year, the Acting Administrator/Deputy Administrator issued directives to senior Agency managers emphasizing the need to hold staff accountable for effective grants management, and requiring managers to include compliance with grants managements policies in mid-year performance discussions with staff. In addition, this year, for the first time, EPA required Headquarters and Regional offices to include in their Integrity Act Assurance letters a description of their efforts to address the grants management weakness. The Agency is supplementing these efforts with an ongoing review of employee performance standards to ensure that standards adequately reflect grants management responsibilities.

EPA is aggressively implementing its recently established policies for grants competition and post-award monitoring. From October 1, 2002 to date, the Agency has more than tripled the percentage of competitive awards to non-profit organizations covered by the competition policy over the level achieved in FY 2002, and the new post-award monitoring policy will significantly increase the level of baseline and advanced monitoring of grantees. All Agency Senior Resource Officials (SROs) submitted FY 2003 post-award monitoring plans to ensure a strong level of commitment to effective grants management and accountability. EPA has developed a new performance incentives award program for grants management. In addition, EPA is meeting planned milestones for strengthening all aspects of grants management. The Agency has, for example: revamped its training programs to focus on core competencies of project officers and grants specialists; initiated a comprehensive, new system of grants management reviews of EPA offices; highlighted in the Agency's 2003 Strategic Plan the importance of effective grants management in carrying out the Agency's strategic goals; established an Agency-wide workgroup to develop grant workplan guidance on environmental outcomes, performance measures and performance reporting; and convened a Grants Management Council composed of SROs to provide for high-level planning and coordination.

FY 2003 Management's Report on Audits

The Inspector General Act of 1978[45], as amended, requires federal agencies to report to Congress on the status of progress in carrying out audit recommendations. Audit management serves as a tool for assessing the Agency's ability to meet its strategic objectives. EPA continues to strengthen its audit management practices and has improved its ability to address and complete corrective actions in a timely manner.

In FY 2003 EPA was responsible for addressing OIG recommendations and tracking follow-up activities on 211 audits. The Agency achieved final action on 115 audits, which include Program Evaluation/Program Performance Audits, Assistance Agreements Audits, Contract Audits, and Single Audits. Results achieved during FY 2003 for the Agency's audit management activities are summarized below:

Final Corrective Action Taken. EPA completed final corrective action on 18 performance and 97 financial audits. Of the 97 financial audits, the OIG questioned costs of more than $90.7 million. After careful review, the OIG and the Agency agreed to disallow approximately $45.3 million of these questioned costs. In the performance audit arena, EPA management and the OIG did not identify funds that could be put to better use.

Final Corrective Action Not Taken. As of the end of FY 2003, 91 audits were without final action and have not been fully resolved (excluding those audits with management decisions under administrative appeal by the grantee).

Audits Awaiting Decision on Appeal. EPA regulations allow grantees to appeal management decisions on financial assistance audits that seek monetary reimbursement from the recipient. In the case of an appeal, EPA must not take action to collect the account receivable until the Agency issues a decision on the appeal. In FY 2003, 61 audits were in administrative appeal.

Final Corrective Action Not Taken Beyond 1 Year. Of the 91 audits without final action, EPA officials had not completed final action on 26 audits within 1 year after the management decision. Because of the complexity of the issues, it often takes Agency management longer than 1 year after management decisions are reached with the OIG to complete the agreed upon corrective actions on audits. These audits are categorized by three types: Program Performance (15), Assistance Agreements (5), and Single Audits (6). These audits are listed below by category, responsible office, audit number and title. Additional information on these audits is available, upon request, from the OCFO's Audit Management Team (202-564-3633).

Audits of Program Performance: Final action for program performance audits occurs when all corrective actions have been implemented. This may take longer than one year when corrections are complex and lengthy. EPA is tracking 15 audits in this category.

Office of Administration and Resource Management:
P00005 CFDA Program
P00011 Superfund Interagency Agreements
P00029 Interagency Agreements Follow-up

Office of Solid Waste and Emergency Response:
P00003 Mega: Environmental Indicators
P00007 RCRA Financial Assurances
P00011 Superfund Interagency Agreements
P00028 RCRA Corrective Actions

Office of Enforcement & Compliance Assurance:
P00018 Multimedia Enforcement
P00019 Air Enforcement Stack Tests
P00004 Quality of Data in Enforcement's DOCKET System

Office of Environmental Information:
501240 PCIE Application Maintenance

Office of Prevention, Pesticides & Toxic Substances:
101378 Pesticides Inerts
304030 Pesticides Banned (follow-up)

Office of Water:
P00010 EPA's Implementation of PDD63

Region 2:
P00001 Combined Sewer Overflows

Audits of Assistance Agreements: Final action for assistance agreement audits can take longer than a year as the grantee may appeal, refuse to repay, or be placed on a repayment plan that spans several years. The Agency's Audit Follow-Up Coordinators are tracking 5 audits with financial or associated corrective actions taking longer than one year to complete.

Region 2:
801045 Parsippany - Troy Hills NJ

Region 3:
102023 Bath County Service Auth VA

Region 5:
103115 Galion, OH
104047 Indianapolis, IN 4

Region 6:
303014 St. Tammany Parish Sewer District 7 LA

Single Audits: Final action for single audits occurs when non-monetary compliance actions are completed. This may take longer than one year to implement if the findings are complex or if the grantee does not have the resources to take corrective action. Single audits are conducted of non-profit organizations, universities, and state and local governments. EPA is tracking completion of corrective action on 6 single audits for the period beginning October 1, 2003.

Region 5:
300047 Red Lake Band of Chippewa Indians
300048 Red Lake Band of Chippewa Indians

Region 9:
805053 Colorado River Indian Tribes, AZ
805059 Colorado River Indian Tribes, AZ
300179 Yavapai - Prescott Indian Tribe
100095 Audit of California State FY2000 CWSRF Financial Statement

DISALLOWED COSTS & FUNDS PUT TO BETTER USE
October 1, 2002 THROUGH September 30, 2003

	Disallowed Costs (Financial Audits)		Better Use (Performance Audits)	
Category	Number	Value	Number	Value
A. Audits with management decisions but without final action at the beginning of FY 2003.	91	$ 149,435,120	25	$ 0
B. Audit for which management decisions were made during FY 2003. (i) Management decisions with disallowed costs. (14) (ii) Management decisions with no disallowed costs. (83)	97	$ 8,718,387	20	$ 0
C. Total audit pending final action during FY 2003. (A + B)	188	$ 158,153,507	45	$ 0
D. Final action taken during FY 2003:	97	$ 43,683,647	18	$ 0
(i) Recoveries				
a) Offsets		$ 8,806,994		
b) Collection		$ 1,963,726		
c) Value of Property		$ 0		
d) Other		$ 1,240,050		
(ii) Write-Offs		$ 526,821		
(iii) Reinstated Through Grantee Appeal		$ 31,146,056		
(iv) Value of recommendations completed				$ 0
(v) Value of recommendations management decided should/could not be completed.				$ 0
E. Audit reports needing final action at the end of FY 2003. (C - D)	91	$ 114,469,860	27	$ 0

Key Management Challenges

(Prepared by EPA's Office of the Inspector General)

EPA has made progress in addressing the ten management challenges identified by the OIG over the past three years. These efforts have included issuing new standards and policies, providing training, and beginning the implementation of cross-cutting strategies in the Agency's *2003 Strategic Plan*. Nonetheless, EPA has not taken all actions necessary to address the challenges and ensure that the actions taken have been effective. If EPA does not take sufficient actions, the challenges will continue to impede the Agency's ability to meet its goals. For example, despite the Agency issuing new standards and policies to improve its management of assistance agreements, the OIG continues to find that EPA is not adequately overseeing these agreements. To address the issue, EPA needs to allocate sufficient resources, hold management and staff accountable for complying with policies, establish success measures, and monitor progress.

EPA's ten management challenges identified by the OIG for FY 2001 - FY 2003 are presented in the following table. Many of these issues are long-standing problems that existed for many years. The table shows the year in which the OIG noted the problems, and describes the relationship to EPA's strategic goals and the President's Management Agenda.

EPA's Top Management Challenges Report by the Office of Inspector General	FY[46] 2001	FY[47] 2002	FY[48] 2003	Link to EPA's Strategic Goal	Link to President's Management Agenda
Linking Mission and Management: Developing more outcome-based targets.	●	●	●	Cross-Goal	Budget and Performance Integration
Information Resources Management and Data Quality: Improving the quality of data used.	●	●	●	Cross-Goal	Expanded E-Government
Human Capital Management: Implementing a strategy to develop staff.	●	●	●	Cross-Goal	Human Capital
EPA's Use of Assistance Agreements to Accomplish Its Mission: Improving management of the billions of dollars of grants awarded by EPA.	●	●	●	Cross-Goal	Improved Financial Performance
Protecting Critical Infrastructure from Non-Traditional Attacks: Protecting physical and cyber-based infrastructures, such as in water sector.	●	●	●	Cross-Goal	
Challenges in Addressing Air Toxics Program Phase 1 & Phase 2 Goals: Reducing air toxic emissions by improving approach and measures.		●	●	Goal 1	
EPA's Working Relationships with States: Improving structure for working with States.	●	●	●	Cross-Goal	
Information Security: Protecting information systems by preventing intrusion and abuse.	●	●	●	Cross-Goal	Expanded E-Government
Backlog of National Pollutant Discharge Elimination System Permits: Addressing backlog of the renewal of permits for water discharges.	●	●	●	Goal 2	
Management of Biosolids: Improving management of sewage sludge to sufficiently protect the public.		●	●	Goal 2	

TIER 1

Linking Mission and Management

EPA can be viewed as a business which must deliver improved environmental and human health protection to its customers, the American people, at a reasonable cost. To tell its story of performance in relationship to goals, the Agency must continue to develop more outcome-based strategic and annual targets in collaboration with its partners. EPA's Draft Strategic Plan attempts to do that. Its design is superior to preceding plans and includes: (1) recognition of Federal, state, and tribal partners who implement the majority of Agency programs; (2) consideration of cross-media issues; (3) improved linkages to objectives and sub-objectives; (4) inclusion of a human capital strategy and external factors affecting each goal; and (5) increased focus on achieving measurable results by including elements of risk, cost/benefit analysis, stakeholder consultations, and science. The draft plan, however, still does not contain sufficient substantiative strategies nor commitments leading to the attainment of its stated goals. Moreover, EPA will need to align its systems and processes with the revised goals so progress against the goals can be measured through accurate, timely performance and cost data. As a first step, EPA is devising a new account structure to permit tracking of program/project and cross-agency activities.[49]

Previously, EPA had output data on activities, but few environmental performance goals and measures, and little data supporting the Agency's ability to measure environmental outcomes and impacts. Reliance on output measures has made it difficult for EPA to provide regions and states the flexibility they need to: (1) direct resources to their highest priority activities, or (2) assess the impact of Agency work on human health and the environment. Better performance measurement and financial accountability can be achieved through clearly linked, meaningful performance measures with defined environmental outcome goals. To be accountable to the American people, EPA and its partners need to capture and report consistently meaningful and timely environmental and human health results, along with cost information.[50]

In FY 2003, EPA issued the first *Draft Report on the Environment 2003* which brought together national, regional, and program office indicator efforts to describe the condition of critical environmental areas and human health concerns. Perfecting this report will be a multi-year process, but preparing the report is a significant step forward. It will allow the Agency to inventory and report on existing indicators, identify data gaps, and develop plans to address the challenges in filling these gaps.[51]

Last year, in response to the need for reliable cost information, the Office of the Chief Financial Officer (OCFO) purchased a financial management business intelligence reporting tool for managerial cost accounting and reporting. OCFO is working with selected offices to define and develop program-specific and executive reports that may help managers analyze data to support resource decisions, manage costs, and gauge program results.[52] As EPA implements cost

accounting, its success will rely on how well program offices: (1) define their mission-critical activities; (2) identify data needs, determine whether such data exists and, if so, where it resides and if not, how will it be gathered; (3) link information systems to optimize data usability and minimize data integrity concerns; and (4) technically design program-specific and executive cost reports using the new reporting tool. OCFO will need to work closely with each program office in these areas for its cost accounting solution to be successful agency-wide.

During the past year, EPA examined options for improvements in its ability to manage for results and account for resources. In November 2002, senior leaders issued a report to the Administrator recommending specific changes in four areas: Planning, Performance Measurement, Accountability and Feedback, and the Agency's Capacity to Manage for Results. The report also suggested improvements for the 2004 budget process.[53]

While EPA has begun the process for linking costs to goals, it must follow through by continuing to work with its regional offices and state and Federal partners to develop appropriate outcome measures and accounting systems that track environmental and human health results across the Agency's new goal structure. This information must then become an integral part of senior management's decision-making process.

Information Resources Management and Data Quality

EPA faces a number of challenges with the data it uses to make decisions and monitor progress against environmental goals. Those challenges cover a broad range of inter-related activities including: using enterprise and data architecture strategies to guide the integration and management of data and make investment decisions; implementing data standards to facilitate data sharing; and establishing quality assurance practices to improve the reliability, accuracy, and scientific basis of environmental data, including data derived from laboratories. EPA and most states often apply different data definitions supporting their own information systems, and sometimes collect and input different data resulting in inconsistent, incomplete, or obsolete consolidated national data.[54] In its mid-year Federal Managers Financial Integrity Act Report for FY 2003, EPA acknowledged IRM data management and Results Based Information Technology Investment Policies as Agency-level weaknesses and has specifically targeted various components for improvement. However, developing a robust data management program remains a complex effort, and several areas need to be completed.[55]

While EPA has developed a Facility Registry System and several metadata registries, it has yet to implement a 1998, agreed-upon, OIG recommendation to formally revise its policies and procedures supporting an Agency standards program.[56] In 2002, EPA issued a new IRM Strategic Plan and the first version of its Target Enterprise Architecture to address integration and management of its environmental data.[57] Management should define other fundamental components of its Target Enterprise Architecture, such as the Geospatial Blueprint, for EPA's data management structure to continue to evolve.

To date, EPA has developed and formally approved nine data standards. EPA also continues to partner with the Environmental Data Standards Council to develop additional standards for environmental information collection and exchange.[58] However, the true challenge lies in the implementation of approved standards, because many parties must follow through for EPA and others to realize the benefits. Some of the approved standards will not be fully implemented until fiscal 2005, and some have only been implemented in a targeted set of national EPA systems. Other EPA systems will be allowed to accommodate such changes as part of their normal re-engineering schedule, and states will be allowed to decide whether or not to adopt these standards. Data standards are a fundamental component for implementing EPA's National Environmental Information Exchange Network and other e-government initiatives.[59] If EPA's exchange network infrastructure is to work effectively, timely implementation should be required for all applicable systems. Moreover, the use of data standards should be a required condition for receiving money under the Exchange Network Grant Program.

Data reliability is another major aspect of data management that needs further attention. Prior audits indicate systems used by EPA's Enforcement, Superfund, and Water programs have inconsistent, incomplete, and obsolete data. For example, the system EPA uses to manage its drinking water programs, SDWIS-FED, is not well-designed and implemented.[60] Also, data in two major Agency systems (National Enforcement DOCKET and Comprehensive Environmental Response, Compensation, and Liability Information System) contain significant error rates in crucial data fields used to track environmental progress on Government Performance and Results Act goals and measures.[61] For example, over 40 percent of on-site action data reviewed within EPA's Comprehensive Environmental Response, Compensation, and Liability Information System contained errors.[62] All EPA organizations that collect, evaluate or use environmental data must develop and implement Quality Management Plans. For a number of years, the Agency has reported the lack of approved Quality Management Plans as an Agency-level weakness. The Office of Environmental Information has taken a number of steps to improve controls, however, some headquarters and regional offices have not developed new Quality Management Plans or revised expired ones.

The Agency has responded to data quality concerns by instituting an Integrated Error Correction Process, which also draws on a national data steward network to track and resolve reported data errors in eleven major data systems.[63] In addition, the Agency continues to develop its Data and Information Quality Strategic Plan to prioritize actions for improving the quality of currently collected data. Upon last review, the draft plan did not address the long-recognized problem of data gaps.[64] However, EPA issued its first *Draft Report on the Environment 2003*, which helped identify the gaps between existing and needed environmental data.[65] Consequently, the Agency expects to issue the final Data and Information Quality Strategic Plan sometime in fiscal 2004.

Questionable analyses by laboratories raise concerns about the effectiveness of environmental decisions and lead to additional costs and unnecessary delays when EPA has to identify and assess the impact of the fraudulent data and undertake additional sampling. In a

June 1999 memorandum to the Acting Deputy Administrator, the OIG suggested actions the Agency could take to better identify data of questionable quality.[66] Ongoing lab fraud investigations in FY 2002 and FY 2003 indicate that despite Agency efforts to ensure improved data quality, manipulated data continues to be generated and supplied to EPA.

OIG reviews and investigations have disclosed a disturbing trend in the number of environmental laboratories that are providing misleading and fraudulent data to the states for monitoring the nation's public water supplies. For example, several current lab fraud investigations involve fraudulent manipulation of data used to evaluate the compliance of public water supplies with Federal drinking water standards. Many other EPA programs (e.g., Superfund, Resource Conservation and Recovery Act, National Pollutant Discharge Elimination System, air toxins, underground storage tanks, and pesticides) have also been impacted by laboratory fraud.[67]

The Agency has conducted extensive technical systems assessment audits at all EPA regional and research laboratories. In addition, EPA has provided fraud detection and awareness training and ethics training; studied electronic methods for screening data; and issued guidance discussing the level of quality assurance given the intended use of data.[68] These efforts should help to improve the quality assurance systems and documentation throughout the Agency's environmental laboratories as well as those laboratories under state oversight. However, until the impact of these and any other recommended actions is realized, EPA must continue to assess and improve its controls over laboratory data quality. In its mid-year Federal Financial Managers Integrity Act report for FY 2003, the Agency considered laboratory quality to be an Agency-level weakness.

Considering the remaining shortcomings in these areas, it is unlikely EPA will have the foundation it needs to share comparable information, monitor environmental activities, or compare progress across the nation in the near future. Moreover, EPA's ability to enforce environmental laws and evaluate the outcomes of its programs in terms of environmental changes may continue to be limited by gaps and inconsistencies in the quality of its data. EPA needs to continue its efforts to identify what data is necessary to manage its programs, and work with its partners to ensure that such information is captured and reported in a timely, accurate, and consistent manner.

Human Capital Management (Formerly Employees Competencies)

The Agency recognizes one of its biggest challenges is the development and implementation of a human capital management strategy that will result in a competent, well-trained, and motivated workforce with the right mix of skills and experience to achieve environmental goals and objectives.[69] Human Capital Management is also one of the President's Management Agenda Initiatives. The General Accounting Office (GAO) has designated it a government-wide high-risk area because planning is weak in most agencies, and workforce deficiencies will be exacerbated by the upcoming retirement wave of the baby-boom generation. In the near term, agencies are expected to link human capital strategies to their mission, use

strategic workforce planning to develop a high-performing workforce, and determine their "core competencies."[70]

GAO recently reported that EPA, like many Federal agencies, has historically given insufficient attention to strategically managing its human capital. To face critical agency-wide human capital challenges, EPA will need to develop a system, supported by reliable and valid workforce data, to ensure that it is hiring the right number and type of people, as well as allocating its existing resources to effectively meet current or future mission needs. While EPA has not yet comprehensively assessed its workforce, it has developed a National Strategic Workforce Planning System that should, among other things, help management identify the technical skills and the number and type of positions required, inventory the skills of the current workforce, examine attrition rates, and forecast the number of new hires required. However, as GAO noted, it is too early to determine how the new system will affect the EPA's ability to systematically allocate staff. The Agency's ability to make difficult staffing decisions also will be compounded by other significant factors. For example, EPA's workforce planning will need to incorporate the implications of other major management initiatives, and take into account the extensive use of grants to states and awards to contractors to perform EPA's work. As such, EPA must ultimately plan for a workforce that is adept at both delivering services directly and managing the cost and quality of services delivered by third parties on the government's behalf .[71]

In addition to piloting a National Strategic Workforce Planning System, EPA has other human capital initiatives aimed at investing in its employees and addressing the skill base needed to accomplish its mission. For example, EPA's Strategy for Human Capital, as proposed in EPA's Draft Strategic Plan, establishes objectives for the Agency which are aligned with the Office of Personnel Management's six pillars of effective human capital management.[72] In addition, EPA's Five-Year Restructuring Plan focuses on how the Agency will address its most critical workforce issues, such as strategic and workforce planning, potential skill imbalances, the quality of science, information technology skills, quality of contracts, and grants oversight.[73] EPA's Senior Executive Service candidate development and mobility programs are additional examples of initiatives aimed at systematically managing succession planning.

While progress has been made and additional work is planned, this area continues to be a key challenge. The OIG will continue to monitor the Agency's progress in developing a system that ensures a well-trained and motivated workforce with the right mix of skills and experience. Implementation of the Human Capital Strategic Plan is an Agency-level weakness under the Federal Managers Financial Integrity Act.

EPA's Use of Assistance Agreements to Accomplish Its Mission

Assistance agreements are a primary means EPA uses to carry out its mission of protecting human health and the environment. More than half of EPA's fiscal 2002 budget was awarded to organizations outside the Agency through assistance agreements. Because the amount is large, approximately $4.7 billion dollars, and it's the primary mechanism EPA uses to fulfill its mission, it is imperative that the Agency use good management practices in awarding and overseeing these agreements to ensure they cost effectively contribute to attaining environmental goals.

EPA's management of assistance agreements has been an area of emphasis for the Inspector General's office for many years. OIG grants management work has focused on crosscutting national issues and has included grants made to states, local and tribal governments, and not-for-profit organizations. The OIG has looked at EPA's major program areas, in EPA headquarters and in EPA regions. The OIG has found that there continues to be systemic weaknesses in how EPA manages assistance agreements.

The OIG has issued several reports since 1998 reporting deficiencies in the EPA's review of assistance agreements prior to the award. In March 2003, the OIG reported that project officers did not perform all necessary steps when conducting pre-award reviews of assistance agreement applications.[74] Specifically, the OIG noted the following in its sample of grants:

- A link was missing between projects funded and Agency mission (19%).
- EPA did not assess probability of success prior to award (31%).
- EPA did not determine reasonableness of proposed project costs (79%).
- Outcomes were not negotiated (42%).
- Milestones and deliverables were not included in workplans (24%).
- EPA did not implement new workplan regulations designed to improve fiscal management and accountability (96%).

Excluding State Revolving Funds, construction grants, and fellowship grants, the Offices of Water and Air and Radiation, and related regional offices, issued about $1 billion in assistance agreements in fiscal 2001. Thus, for example, based on the OIG's random sample, in fiscal 2001 these offices awarded at least (1) $42 million without determining the relevance of proposed workplans to EPA program objectives; (2) $88 million without assurance that recipients were able to perform projects that would help accomplish program objectives; and (3) $536 million without performing cost reviews.

OIG reports also continue to identify examples of EPA staff not adequately overseeing recipients of assistance agreements awarded to states for environmental programs. A February 2003 report found that EPA Region 6's oversight of Louisiana was insufficient and could not assure the public that Louisiana was protecting the environment.[75] The OIG initiated this review because EPA had received petitions from citizen groups to withdraw the National Pollutant Discharge Elimination System water program, the Resource Conservation and Recovery Act

hazardous waste program, and the Title V air permit programs from Louisiana.

EPA's lack of review and oversight can contribute to problems with grantees. For example, the OIG questioned $1.6 million in costs claimed by a recipient for, among other things, improper procurement.[76] The recipient did not competitively procure equipment and services, and did not perform cost or price analysis for the purchases.

Deficiencies in EPA's pre-award reviews and post-award oversight were not due to the lack of policies, but rather existing policies and guidance were not always followed. EPA policies and guidance identify the reviews EPA staff are to perform prior to and after assistance agreements are awarded. However, EPA staff did not always follow the policies and were not held accountable when they did not do so.

If EPA is to improve its management of assistance agreements, it needs to allocate adequate resources to the function and hold management and staff accountable for adhering to Agency policies that promote good management of assistance agreements. In April 2003, EPA issued a Grants Management plan that includes actions to address recommendations the OIG has made in recent audit reports. The challenge for EPA management and staff will be implementing the corrective actions and incorporating new practices into the day-to-day management of assistance agreements. The OIG is recommending the Agency elevate this issue from an Agency-level weakness to a material weakness under the Federal Managers Financial Integrity Act.

Protecting Critical Infrastructure From Non-Traditional Attacks

EPA continues to execute its responsibilities to protect critical physical and cyber-based infrastructures per Presidential Decision Directive 63 issued in May 1998.[77] The terrorist attacks of September 11, 2001, greatly increased the scope and priority of EPA's critical infrastructure protection mission.[78] While EPA outlined its critical infrastructure protection goals in the Agency's September 2002 *Strategic Plan for Homeland Security*, the Agency needs to continue refining its performance expectations and measures to demonstrate improvements in key asset security.[79]

The Office of Homeland Security issued its *National Strategy for Homeland Security* in July 2002,[80] and its *National Strategy for the Physical Protection of Critical Infrastructures and Key Assets* in February 2003.[81] Both *Strategies* designate EPA as the lead agency for protecting critical infrastructure and key assets in the water and chemical industry and hazardous materials sector.[82] EPA's lead agency designation complements the Agency's traditional roles of: oversight in water and wastewater infrastructure security; cleanup of chemical, biological, and certain radiological attacks; and regulation over chemical facilities.[83] Moreover, Public Law 107-188, the Public Health Security and Bioterrorism Preparedness and Response Act, signed in June 2002, specifically tasked EPA with funding and overseeing water system vulnerability

assessments and resulting emergency response plans.[84] EPA further defined its infrastructure protection needs through the lessons the Agency learned from the World Trade Center response and the cleanup of Anthrax-contaminated buildings.[85]

To ensure the desired state of security and achieve the goals in EPA's *Strategic Plan for Homeland Security*, the Agency will need to apply technical, organizational, resource, training, and communication assets to complex issues with unprecedented dispatch.[86] Critical infrastructure protection efforts already undertaken by the Agency include:

- facilitating the development of water system vulnerability assessment methodology and training;[87]
- providing financial assistance to large drinking water systems to conduct one-time vulnerability assessments and grants to states to provide vulnerability assessment training and technical assistance to medium and small water systems;[88]
- providing baseline threat guidance to water utilities;[89] and
- collaborating with other federal stakeholders to develop guidance on protecting building environments from airborne attacks.[90]

EPA's efforts to enhance critical infrastructure protection are commendable, however, EPA will need to better define performance expectations and develop systems to effectively measure and analyze program performance. The Agency's success will require simultaneous attention to questions of threat, capabilities and deficiencies, preparedness, management and oversight, as well as effective coordination with EPA's partners at all levels of government and industry.[91]

Challenges in Addressing Air Toxics Program Phase 1 and Phase 2 Goals

Toxic air pollution remains one of the most significant health and environmental problems in the U.S., causing cancer, neurological, immunological, and other serious health problems.[92] EPA's goal is to eliminate the risks of cancer and other significant health problems from air toxics emissions for 95 percent of the U.S. population by 2020.[93] EPA has increased its efforts to address Phase 1 and Phase 2 air toxics goals as evidenced by a 43 percent increase in funding over the past 5 years, from $89.9 million in FY 1999 to an FY 2004 budget request of $127.7 million.[94]

EPA has been implementing a two-phase program to reduce air toxics emissions from major stationary sources. Phase 1 is solely a technology-based approach to reducing air toxics, while Phase 2 assesses the level of risk remaining after the Phase 1 controls are in place.[95] Despite the potential for serious harm, EPA is over 2 years behind in fulfilling its statutory responsibilities for issuing all Phase 1 air toxics standards (also known as MACT[1] standards[96])

[1]MACT = Maximum Achievable Control Technology. In essence, Phase 1 requires EPA to identify the control technologies used by the best performing 12 percent of sources in a particular category, and then require that all other sources in the same category meet the same level of emissions reductions as the best performing 12 percent (*see endnote no. 2 below).*

by the November 2000 statutory deadline.[97] Recently, however, EPA has made substantial progress and has 79 MACT standards promulgated and the remaining 19 standards proposed, with an expected completion date of February 2004.[98] When completed, these 98 MACT standards will address air toxics emissions from the 174 categories EPA is required to regulate.[99] EPA's delay in issuing the Phase 1 MACT standards was identified as an Agency weakness in 2001.[100]

EPA is continuing to shift the emphasis from Phase 1 to Phase 2, and is currently assessing the toxic health risks from more than 1,000 sources in 20 source categories.[101] However, no Phase 2 residual risk standards have yet been completed, although 7 risk assessments were due by the end of 2002.[102] The Science Advisory Board has questioned EPA's early efforts at assessing residual risks.[103] Although the Clean Air Act Amendments of 1990 listed 188 air toxics that EPA must control, to date the Agency has focused largely on 33 of the suspected worse air toxics prevalent in urban areas.[104] Significant data gaps in the OIG's understanding of these 33 highest priority air toxics still exist.[105] Additionally, EPA has limited health and ecological effects information, exposure data, emissions data, source characterization data, and ambient data on many of the remaining 155 air toxics.[106]

Emissions from mobile sources comprise about half of the air toxics emissions inventory,[107] with area sources and major stationary sources accounting for about 25 percent each.[108] For major stationary sources, the air toxics program relies heavily on industry emissions data for its Government Performance and Results Act measures, some of which are generated by using inferior emission estimation techniques.[109] The lack of a robust set of ambient monitoring data on the quantity and concentrations of air toxics is also a concern.[110] There is also little health data on the synergistic impacts of exposures to multiple air toxics, such as the exposures that routinely occur in urban areas - - the types of exposures that some scientists believe are the leading health impact from air toxics.[111] The OIG will continue to monitor the progress EPA makes in addressing these important issues.[112] In the Agency's mid-year Federal Managers Financial Integrity Act (FMFIA) Report for FY 2003, the Agency identified Meeting Statutory Deadlines for the Air Toxics Regulatory/Residual Risk Program as an Agency-level weakness.

TIER 2

EPA's Working Relationship With the States

According to the Environmental Council of the States, in FY 2001, the authority to implement about 80 percent of the environmental programs rested with the states, which provided about 65 percent of the financial resources to EPA's 35 percent. Accordingly, the Agency relies to a great extent on states for environmental results and for the data used to measure environmental conditions and performance. Yet, the Agency and states have been unable to agree on state flexibility and accountability issues. Relations remain strained due to disagreements over: (1) respective roles and the extent of federal oversight; (2) priorities and budgets; and (3) results-oriented performance measures, milestones, and data. EPA can improve its working relationship with states by establishing a structure to mutually set direction, establish goals, provide training, oversee accomplishments, and ensure accountability.[113]

The National Environmental Performance Partnership System (NEPPS) established EPA-state working partnerships to accomplish complex environmental issues with scarce resources. One of the primary tools for implementing NEPPS, performance partnership grants (PPGs), allows states and tribes to combine multiple EPA grants into one. In 1999 and 2000, a series of OIG audits on regional and state NEPPS program implementation (including PPGs) reported that NEPPS principles were not well-integrated into EPA because of the lack of: (1) leadership providing a clear direction and expectations, (2) training and guidance, (3) trust in NEPPS due to fear of change and losing control, and (4) goals and related performance measures to monitor and measure progress on achieving better environmental results.[114]

Recent OIG audits have found that EPA needs to continue to make improvements in the implementation of NEPPS. A 2002 audit of state self assessments of environmental programs, one component of NEPPS, found that EPA and the states had not widely adopted the concept. Many states were not performing self assessments, their content varied, and they had little impact on the environmental performance agreement. This had occurred because EPA had not taken a leadership role to define to staff and states its expectations for self assessments. Subsequent to the report, the Agency decided to pursue an improved priority setting and joint evaluation process, as described in EPA regulations, as opposed to the self assessment process. EPA management needs to define the expectation for the joint evaluation process if it is to contribute to a more effective partnership with states.[115]

If EPA is to have a productive relationship with states, it also needs to more clearly define its role in overseeing state programs. A 2003 OIG audit found that Region 6 leadership did not develop and clearly communicate a vision and measurable goals for its oversight of one its states, Louisiana. This contributed to a strained working relationship with Louisiana. Region 6 leadership also had not defined what a successful oversight program should be, and had not identified the means for measuring the value of its oversight, which resulted in the region not being able to determine whether its oversight was successful.[116]

In 2003, the Administrator committed to streamline and improve how EPA and states

deliver environmental protection, and encouraged states to take full advantage of NEPPS and PPGs. To advance partnerships, EPA is working to improve the (a) role of states in the planning and budgeting process, (b) process for awarding PPGs, (c) joint evaluation process, and (d) performance measurement process.

EPA's Information Systems Security

EPA's information systems collect, process, store, and disseminate vast amounts of information used to help make sound regulatory and program decisions. Protecting them is as important as protecting other organizational resources, such as money, physical assets, or employees. Therefore, it is essential that the Agency prevent intrusion and abuse of these systems and protect the integrity of its data.

Under the leadership of the Office of Environmental Information (OEI), EPA's goal is to make information on its computer systems available, while protecting the confidentiality and integrity of its information.[117] As indicated in its second annual report to the Office of Management and Budget, EPA continues to enhance its Information Security Program through continuing risk assessments of its major systems, monitoring networked servers, using security self-assessments that conform to government-recognized guidelines, conducting internal and external network penetration tests, and monitoring the Agency's firewall and intrusion detection system.[118] These positive actions resulted in downgrading information security to an Agency-level weakness under the Integrity Act.

The dynamic nature of security, however, requires continued emphasis and vigilance, and the OIG believes the following additional actions are needed to protect EPA's information and systems.

- Provide greater assurance of protecting its critical information technology (IT) infrastructure. Specifically, EPA should ensure backup procedures are established at all critical sites, and plan and conduct tests of its contingency capabilities. Furthermore, the Chief Information Officer should exercise oversight to ensure appropriate offices allocate sufficient resources to complete planned corrective actions that will mitigate vulnerabilities previously identified by the General Accounting Office.[119]

- Establish a robust quality assurance program. OEI needs to increase its oversight activities that (1) independently verify and validate the implementation of the security program, and (2) evaluate the performance of major agency components.[120] For example, ongoing audit work shows that OEI relies on, and subsequently reports to OMB, a significant percentage of inaccurate and unsupportable information which it has collected through annual system security self-assessments.[121] Other audit work also determined that OEI needs to do more to ensure EPA program officials assess the risks to operations and assets under their control and determine the level of security appropriate to protect

such assets and operations.[122] Without regular, effective oversight processes, EPA will continue to place unsubstantiated trust in its many components to fully implement, practice, and document security requirements.[123]

- Establish an effective security training program that (1) identifies IT security personnel associated with overseeing, managing, or maintaining critical cyber-based assets, and (2) establishes baseline security training requirements for these personnel.[124]

- Establish a process to ensure that the Agency's information security plan is practiced throughout the life cycle of IT systems. Specifically, EPA needs to update security plan policies and guidance to align them with current federal standards and set milestone dates when plans will be in compliance.[125] Additionally, EPA needs to update policies and guidance for Systems Life Cycle Management to incorporate security planning.[126]

- Establish a process to complete timely background investigations on contractor personnel who, by the nature of their work, have access to sensitive and/or confidential files. At this time there are contract employees with such access who have not received any clearance. During the last year a contract employee who had access to CBI information was arrested on a felony warrant. Employees within OEI have openly commented that the failure to have background checks on all contract personnel still exists. This issue keeps the Agency at risk from the leaking or outright theft of Agency controlled information, or destruction of that information. It also opens the risk of network monitoring or tampering by a contract employee with elevated user access rights.

Backlog of National Pollutant Discharge Elimination System (NPDES) Permits

The Clean Water Act specifies that NPDES permits expire in five years.[127] Permittees wishing to continue discharging beyond that term must apply for permit renewal at least six months prior to the expiration date of their permit.[128] If the permitting authority receives a renewal application but does not reissue the permit prior to expiration, the permit may be "administratively continued."[129]

Administratively continued, or "backlogged," permits are a major concern because conditions may have subsequently changed since the original permit was issued, and new restrictions on permits may now apply. However, "backlogged" permits would not contain these new terms and conditions, thereby delaying potential environmental improvements to waters.[130]

The Agency recognizes that the backlog of NPDES permits is a nationwide problem and has developed a corrective action plan.[131] The plan includes (1) using new technology to streamline the permit development process, (2) providing environmental assessments and permit assistance to the states, and (3) communicating the importance of this issue to the states and EPA regional offices and receiving their firm commitments to reduce the backlog.[132]

The NODES permit backlog has been tracked by the Agency as a FMFIA material weakness since 1998 until its reduction in status to an Agency level weakness at the end of

2002.[133] The OIG reported the backlog as a management challenge starting in 1998 and most recently reported it as a Tier II Management Challenge.[134] EPA's goal was to reduce the backlog of NPDES permits for major facilities to ten percent by the end of calendar year 2001 and to ten percent for major and minor permits by the end of calendar year 2004.[135] As of March 2003, EPA reports indicate that the backlog for majors was 17% and for minors was 19.2%.[136] During FY 2002, EPA drafted a system for prioritizing and reissuing backlogged permits to focus on those with the most significant environmental impact, but the Agency no longer expects to meet its 2004 goal. The agency now says that it's on track for correction by FY '05.[137]

This issue is an Agency-level weakness under the Federal Managers Financial Integrity Act. The OIG will continue monitoring EPA's progress in addressing this important issue. The OIG is in the preliminary research phase of an evaluation directed toward assessing (1) the extent of the environmental impact of the NPDES permit backlog, (2) how well the NPDES backlog measures reflect environmental impacts of delayed permit reissuance or issuance and (3) how successful EPA and states have been at managing the backlog.

Management of Biosolids

Approximately six million tons of sewage sludge ("biosolids") are produced annually by sewage treatment plants in the United States.[138] With inadequate treatment these biosolids may contain a wide variety of chemicals and pathogens, the remains of the sewage treatment process[139]. The OIG believes that (1) EPA does not know whether current regulations, when adhered to, are protective of public health;[140] (2) EPA does not have an overall understanding of the magnitude and quality of biosolids production and disposal practices;[141] (3) EPA does not know if the enforcement and compliance resources committed to managing biosolids are adequate to ensure that the regulations are adhered to.[142]

EPA has not conducted the basic research needed to determine the risk associated with certain biosolids disposal practices.[143] The Agency has taken the position that biosolids management is a low-risk activity.[144] As a result, EPA did not meet its commitment to comprehensively assess the extent of the risk.[145] EPA issued Part 503 of Title 40 of the Code of Federal Regulations ("The Sludge Rule") to govern the use and disposal of biosolids in February 1993 under court order. When it issued the rule, EPA committed to conducting a comprehensive research program to assess the risks associated with land application of biosolids, yet it has not yet done so.[146] In June 2002 the National Academy of Sciences (NAS) recommended additional research,[147] and in April 2003 announced its plans for how it will respond to them. It has committed to producing a research work plan by the beginning of 2004.[148]

EPA uses the Permit Compliance System (PCS) to manage water quality activities of point source dischargers such as sewage treatment plants, but PCS is acknowledged by the Office of Water (OW) as inadequate for managing biosolids.[149] EPA is unable to answer basic questions such as how much biosolids are land-applied.[150] As a result of this data gap, OW

developed an independent system, the Biosolids Data Management System (BDMS), to track compliance with biosolids regulations.[151] EPA is revising PCS, but has not yet decided whether to incorporate BDMS into this new version. According to OW, "the ultimate usefulness of the BDMS on a national basis is likely dependent upon its adoption into PCS."[152]

EPA has diverted compliance and enforcement resources away from this program. The safety of biosolids land application depends on the adherence to highly technical treatment standards by land applicators across the country. In a 2000 report the OIG found inadequacies in EPA's management and enforcement of the biosolids program.[153] In a status report on the biosolids program published two years later, the OIG reported a further 44% reduction in full-time equivalent positions (from 18 to 10).[154] This is a particular concern because EPA runs the biosolids program in 45 states.[155] Adequate oversight of this program is critical for ensuring regulatory compliance. To date, EPA has not committed the resources needed to fulfill its oversight responsibilities.

Although EPA is directing renewed attention to this area several issues remain unsettled. The uncertainties and management gaps discussed above have contributed to a series of court cases across the nation contesting the land application of sewage sludge. The OIG will continue to monitor EPA's progress dealing with these issues.

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