

### EPA's FY 2008 Performance and Accountability Report

# Appendix A Program Evaluations Completed in FY 2008

This document is one appendix 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="mailto:ncepimal@one.net">ncepimal@one.net</a>.

### **Findings**

#### Recommendations

1 More Action Needed to Protect Public Indoor Air Risks

EPA, Office of Inspector General (OIG)

The evaluation was conducted to determine how EPA measures Indoor Radon Program results, what results were achieved at the regional and state levels with the State Indoor Radon Grant funds, what changes might be made to the Indoor Radon Program to improve its effectiveness and efficiency in meeting its short- and long-term goals, and the challenges to adopting the recommended changes.

The Indoor Radon Abatement Act (IRAA) established the goal that indoor air should be as free of radon as the outdoor air. The radon program is not achieving greater results for several reasons: 1) EPA's ability to achieve results with a voluntary program is limited, 2) potential loss of a sale represents a disincentive for real estate agents and sellers to conduct radon tests during real estate transactions, and 3) added expense represents a disincentive for builders to use radon-resistant new construction. Opportunities exist within the federal community to substantially increase the number of homes tested and mitigated for radon. EPA has not decided how to use all its authorities to achieve the Act's goals. Also, EPA has not been publishing in its performance reporting program results in relation to homes at risk.

The OIG recommended that EPA develop a strategy for achieving the IRAA's long-term goal and consider using its authorities granted by Congress or explain its alternative strategy. The OIG also recommended that EPA identify to Congress limitations to meeting the goal, as well as recommending improvements to how EPA measures and reports program results.

1 Voluntary Greenhouse Gas Reduction Programs Have Limited Potential

EPA, Office of Inspector General

The OIG conducted this review to evaluate the extent to which EPA's greenhouse gas (GHG) programs can significantly reduce future GHG emissions and whether their data are complete and reliable.

The set of voluntary GHG programs the OIG reviewed includes outreach efforts to recruit program partners and reduce GHG emissions. The OIG found that the greatest barriers to participation in the voluntary GHG programs were the perceived emission reduction costs and reporting requirements. The OIG also found that these voluntary programs are not likely to reduce more than 19 percent of the projected 2010 GHG emissions for their industry sectors. From this, the OIG determined that if EPA wishes to reduce GHG emissions beyond this point, it needs to consider additional policy options. The OIG also found that eight of the 11 programs in the review showed weaknesses in their current data collection and reporting systems.

The OIG recommended that EPA review emission reduction cost analyses annually and update them as needed. For programs that recruit and enroll participants, EPA should adopt written partnership agreements that require stronger data quality provisions on how confidential business information will be handled. For programs that do not recruit and enroll participants, EPA should develop a policy or procedure that specifically identifies how these voluntary GHG programs link their reported outcomes to program efforts.

### **Findings**

#### Recommendations

1 Improvements in Air Toxics Emissions Data Needed to Conduct Residual Risk Assessments

EPA, Office of Inspector General

The 1990 Clean Air Act
Amendments required EPA to
develop maximum achievable
control technology (MACT)
standards to reduce air toxics
emissions from stationary
sources. In 2004, EPA
completed the last of its MACT
standards. The OIG conducted
this evaluation to assess the
effectiveness of those standards
in reducing air toxics emissions.

**EPA's National Emissions Inventory** (NEI) data indicate an overall decline in air toxic emissions concurrent with implementation of the MACT standards. Although NEI data reliability is uncertain, it is reasonable to conclude that air toxics emissions have decreased. This review suggests that the MACT program has played a role in these reductions. EPA plans to use NEI data to assess the public health risk remaining from MACT sources' air toxics emissions but the reliability of NEI data for site-specific emissions varies considerably. In December 2006, EPA presented its plan for conducting residual risk assessments to EPA's Science Advisory Board. The Board's June 2007 report recommended several actions to improve this process. These recommendations included developing a framework for improving the NEI data and conducting an analysis to determine the impact of data uncertainty on the risk assessments. In March 2007, EPA solicited public comment on the NEI and other data it plans to use for conducting residual risk assessments.

The OIG recommended that EPA develop data quality objectives (DQOs) for using the NEI data in conducting residual risk assessments and establish requirements for state reporting of air toxics emission data and compliance monitoring information.

1 Mid-Cycle Review of the Office of Research and Development's Air Research Program at the U.S. Environmental Protection Agency

EPA, Board of Scientific Counselors (BOSC)

BOSC "mid-cycle" reviews are designed to gauge the program's progress with respect to 1) its future direction and 2) performance and accountability. While narrower in focus than the in-depth technical evaluation that constitutes a full BOSC program review, the mid-cycle review provides the program with critical information on its progress to date.

The transition of the Program from the PM and Ozone Programs to the Air Research Program has clearly been successful. The revised Long-Term Goals (LTGs) are intended to address regulatory needs and to build the knowledge base for a multi-pollutant approach to controlling air pollution. The response to the 2005 program review was highly positive. Overall, the BOSC found that the Air Research Program is meeting its goals and is conducting the appropriate high-quality science to meet those goals. The BOSC rated the progress of the program as "exceeds expectations."

The BOSC recommended that future research include a focus on the role of composition and of atmospheric chemistry on the toxicity of particles.

### **Findings**

#### Recommendations

2 EPA Assisting Tribal Water Systems But Needs to Improve Oversight

EPA, Office of Inspector General

The OIG undertook the evaluation to assess EPA's oversight and assistance of tribal community water systems (CWSs), and to independently evaluate water quality at selected systems.

Tribal drinking water sample results in EPA files indicate that drinking water supplies consistently met regulatory requirements. Regional EPA staff also made correct compliance decisions with sample results that tribal CWSs provided. However, internal control deficiencies existed in administering EPA's oversight of tribal CWSs in two of the five regions the OIG reviewed. To varying degrees, tribal drinking water records in four of the five regions were incomplete due to a failure to maintain oversight of system operations and/or poor records management. In determining if tribal CWSs exceeded drinking water regulatory limits, the OIG found that of the approximately 2,300 independent samples analyzed, only seven were above the limits. In those cases, the OIG informed regional staff and water system operators, who then took follow-up actions.

The OIG recommended that the Assistant Administrator for Water:

- Establish national and regional tribal drinking water program standard operating procedures in coordination with Regional offices.
- Require Region 2 to submit a plan that corrects deficiencies in how it currently implements its tribal drinking water program, including those identified in this report.
- Direct regions to issue monitoring and reporting violations, take appropriate enforcement actions against tribal CWSs with health-based violations or that fail to monitor or submit monitoring reports, and enter violations into the Safe Drinking Water Information System.

2 Summary of Recent Developments in EPA's Drinking Water Program and Areas for Additional Focus

EPA, Office of Inspector General

This review included a summary of the findings and recommendations from recent evaluation reports by the OIG, the Government Accountability Office (GAO), and others; tracking of significant program developments; and identifying challenges to help focus future evaluation efforts.

The drinking water program faces challenges, notably limited resources, emerging contaminants and new regulations, and system security issues. We suggest future evaluations for several areas of the drinking water program. These reviews should allow EPA to determine how well its programs are working and help it direct resources toward its most pressing needs. Priority should be given to water securityresponse capability, chemical security at drinking water facilities, variances/exemptions and waivers, effectiveness of Agency funding, and the contaminant selection process. Other areas meriting review include interprogram linkages, Underground Injection Control-Class V wells, transient and non-transient non-community water

None.

### **Findings**

#### Recommendations

systems, and the recent modernization of the Safe Drinking Water Information System.

2 Evaluating the Effectiveness of the Targeted Watersheds Grant Program

Industrial Economics, Inc.

EPA's Office of Wetlands. Oceans, and Watersheds (OWOW) initiated this evaluation to assess whether the Targeted Watersheds Grant (TWG) program has been effective in building on the successes of public/private watershed partnerships; promoting the achievement of incremental, yet tangible, on-the-ground results; and encouraging innovative approaches to advance the protection and restoration of water resources. EPA selected Industrial Economics, Inc., to conduct the evaluation; specifically, to determine the impact of the TWG program on efforts to protect and restore watersheds and how aspects of the program and characteristics of grantee organizations contribute to the successful implementation of watershed approaches.

Adequate funding is key to supporting the implementation of watershed projects. It is a primary factor in the success of TWG grantees. Many interview respondents, Regions and later implementation grantees in particular, identified a need for EPA to expand the level of outreach and technical assistance it provides to grantees. The National Program Office needs to clearly define the output and outcome measures it wants grantees to incorporate into their work plans, and issue guidance to grantees and Regions that conveys its expectations for measurement and tracking of results. A few Regions and implementation grantees recommend that EPA develop a standard set of measures, including information requirements for establishing baseline measures against which progress can be compared. Several interview respondents recommended increased EPA funding to support capacity building efforts conducted by national service provider organizations and local planning and capacity-building projects by implementation grantees.

EPA should consider:

- Providing additional guidance and assistance to help TWG grantees effectively measure their progress and achievement of social, organizational, and environmental outcomes.
- Increasing grantees' access to technical assistance and promoting inter-grantee communication and the exchange of TWG success stories and lessons learned.
- Establishing linkages between the TWG program and other EPA program offices to expand the pool of resources available to grantees.
- Streamlining the TWG program application process and grantee reporting requirements.

The Relationship Between In-Home Water and Sewer Service and the Risk of Respiratory Tract, Skin, and Gastrointestinal Track Infections Among Rural Alaska Natives

Centers for Disease Control and Prevention (CDC)

CDC investigated the relationship between the presence of in-home piped water and wastewater services and hospitalization rates for respiratory tract, skin, and

Regions with a lower proportion of home water service had significantly higher hospitalization rates for pneumonia and influenza (rate ratio [RR]=2.5), skin or soft tissue infection (RR=1.9), and respiratory syncytial virus (RR=3.4 among those younger than 5 years) than did higher-service regions. Within one region, infants from villages with less than 10% of homes served had higher hospitalization rates for pneumonia (RR=1.3) and respiratory syncytial virus (RR=1.2) than did infants from villages with more than 80% served. Outpatient *Staphylococcus aureus* infections

Higher respiratory and skin infection rates were associated with a lack of in-home water service. This disparity should be addressed through sanitation infrastructure improvements.

gastrointestinal tract infections in rural Alaska. They determined in-home water service and hospitalization rates for selected infectious diseases among Alaska Natives by regions during

2000 to 2004. Within one region, infant respiratory hospitalizations and skin infections for all ages were compared by village-level

### **Findings**

(RR=5.1, all ages) and skin infection hospitalizations (RR=2.7, all ages) were higher in low-service than in high-service villages.

3 Evaluating Future Directions of the Plug-In To eCycling Program

and water services.

Indtai, Inc.

The evaluation focused on the partnership program Plug-In To eCycling as it relates to increasing the reuse and recycling of end-of-life electronics.

The findings of the evaluation are:

- The infrastructure and market for ecycling are in the growth stages, yet significant progress has been made.
- The ecycling opportunities available to consumers are difficult to track and characterize.
- There are significant opportunities to increase consumer awareness of ecycling opportunities and benefits.

Recommendations

The recommendations of the evaluation are:

- Play a more active role in working with industry partners.
- Consider leveraging trade associations on industry wide topics.
- Assume a stronger "quarterbacking" role in coordinating multistakeholder efforts.
- Focus attention on removing barriers and obstacles to costeffective ecycling.
- Bolster partners' understanding of Plug-In's strategy.
- Improve consumer recognition of the Plug-In brand.
- Establish a baseline of partner performance against which future progress can be measured.
- Assume leadership on building a capacity to track electronics collections and recycling.
- Clarify how Plug-In will interface with state ecycling programs, in light of state mandated recycling programs.

### **Findings**

#### Recommendations

Aboveground Oil Storage Tanks: 3 More Complete Facility Data Could Improve Implementation of EPA's Spill Prevention Program

> Government Accountability Office (GAO)

GAO conducted their analysis by meeting with officials in the EPA Headquarters' oil spill and enforcement programs, surveying all 10 EPA Regional offices about facility identification and inspection practices, visiting Regions 5 and 6 to discuss their Spill Prevention, Control and Countermeasure (SPCC) programs and attend site inspection visits, and discussing oil spill programs with six states. GAO compiled information on the differences in Regional programs during their visits to Regions 5 and 6. They also focused on different enforcement processes and mechanisms used by each region.

GAO findings on Regional variability:

- Regional offices can implement the oil program according to their individual circumstances, leading to regional variations in the number of oil facility inspections.
- GAO recognized that EPA has begun to implement policies to promote consistency in how the oil regulations are interpreted and enforced.

GAO findings on the number of regulated facilities:

- EPA has information on only a portion of the facilities subject to the oil rules, hindering its ability to identify and effectively target facilities for inspection and enforcement, and to evaluate whether the program is achieving its goals.
- · While inspections are generally riskbased, the risk assessments do not include many unknown facilities that may pose more serious threats than those targeted for inspection.
- Incomplete information on which facilities are subject to the rules, and where and how often leaks may occur, prevents EPA from effectively targeting inspections to facilities that potentially pose the highest risks.

GAO findings on State oil spill programs:

- Five of six state programs reviewed use tank registration and reporting systems to collect data on oil storage facilities, giving them information on the universe of facilities subject to state regulations and the ability to inspect and/or target those that they believe present the highest risks of spills.
- By taking a similar approach, EPA would have more complete data for setting inspection priorities based on risk.

GAO recommends that EPA:

- Analyze options for obtaining data on SPCC-regulated facilities, including a tank registration program.
- Develop guidance for EPA regions on how to better coordinate with states on SPCC issues
- Finish developing performance measures and obtain data to evaluate SPCC program effectiveness.

In commenting on a draft of this report, EPA generally agreed with GAO's recommendations and provided a number of technical comments that were incorporated into the report, as appropriate.

3 Hazardous Materials: EPA Mav Need to Reassess Sites Receiving AsbestosPer GAO. EPA may need to reassess sites receiving asbestos-contaminated ore from Libby, Montana, and should

The EPA Office of Solid Waste and Emergency Response (OSWER) has

Findings

Recommendations

Contaminated Ore From Libby, Montana, and Should Improve Its Public Notification Process

Government Accountability Office

GAO was asked to (1) describe the status of EPA's and other federal agencies' efforts to assess and address potential risks at the facilities that received contaminated Libby ore and (2) determine the extent and effectiveness of EPA's public notification efforts about cleanups at sites that received Libby ore. GAO, among other steps, convened focus groups in three of the affected communities to address these issues.

improve its public notification processes.

developed a vermiculite site strategy whereby vermiculite ore sites potentially contaminated with Libby ore will be further assessed by applying the recently developed "Framework for Investigating Asbestos-Contaminated Superfund sites." The focus of the further assessments will be on the known 105 exfoliation sites. Additional programmatic guidance and training is being developed to support the overall strategy. The guidance and training will also address, as necessary, public notification and outreach. The evaluation does not alter the goals and objectives identified in the Strategic Plan, nor does it impact the strategic architecture. scope of measurement or target levels. The results of the evaluation do not change our performance measures. The vermiculite sites strategy issued as a result of the evaluation will result in an increase in site assessments which may lead to additional removal actions, which is one measure of performance in our program.

3 EPA Decisions to Delete Superfund Sites Should Undergo Quality Assurance Review

EPA, Office of Inspector General

The OIG sought to determine whether deletions from the Superfund National Priorities List (NPL) have (1) consistently

As of September 2007, EPA had deleted 322 sites from the NPL. Among the eight sites reviewed, documentation for the Agency's decision to delete three sites was not consistent with EPA guidance. The Agency's decisions for two of these sites were also not consistent with criteria specified by EPA guidance and not supported by data and analysis. EPA

The OIG recommended that EPA implement a national quality assurance process that ensures deletion decisions meet criteria specified by EPA guidance and the NCP. They recommended there be actions to ensure

followed EPA guidance and met the National Contingency Plan (NCP) criteria and (2) been supported by complete and high quality data and analysis which provide reasonable assurance that public health and the environment are protected. Eight deleted NPL sites were reviewed from EPA Regions 3 and 5. The OIG selected these sites based on where information presented in public notices, 5-review review reports, and/or other relevant documents appeared inconsistent with deletion criteria specified by EPA guidance and the NCP. Documents and data were reviewed and officials from the Regions were interviewed.

### **Findings**

did not ensure cleanup activities and goals were complete and remedies were fully protecting human health and the environment before deleting these two sites.

#### Recommendations

better support for deletion decisions and oversight of ongoing cleanup activities.

### 3 Performance Indicators for EPA Emergency Response and Removal Actions

### Abt Associates

The purpose was to assess the outcome of individual fund-led emergency response and timecritical removal actions. This subset of actions was selected because they require more investment of EPA time and resources than actions led by Potentially Responsible Parties (PRPs), and also data are more likely to be readily available. The evaluation tool and the results of the evaluation will be of interest primarily to EPA staff with responsibility for conducting and managing removal actions.

### Findings include:

- Indicators for emergency responses and time-critical removals vary.
- Definitions of "success" and opinions on appropriate indicators vary.
- Indicators are largely subjective in nature.
- Information readily available to apply indicators is limited.

### Recommendations include:

- Apply the evaluation tool in the context of performance indicators.
- Implement a basic scoring approach initially.
- Solicit feedback from a broad audience on proposed performance indicators.
- Use the evaluation tool to frame lessons learned documents.
- Select a subset of removal actions and establish a data collection approach.
   Consider a case-study approach to evaluating specific actions.

Anup

Neither EPA nor the New Jersey
Department of Environmental Protection
(NJDEP) took actions needed to ensure
progress at seven New Jersey–led
Superfund site cleanups.

3 Improved Controls Would Reduce Superfund Cleanup Backlogs

EPA, Office of Inspector General

The OIG sought to determine why some hazardous waste sites

The OIG recommends that the Region 2 Administrator direct staff to coordinate, with NJDEP officials, the cleanup of specified sites more than 20 years old. Region 2

Findings

#### Recommendations

in the Superfund program that existed prior to October 1986 have not yet had remedial construction completed. The OIG also reviewed the impacts resulting from sites not yet achieving construction completion.

should assume lead status from New Jersey for those sites where both agencies agree it would be beneficial and develop Letters of Agreement for those sites. It was also recommend that the Assistant Administrator for Solid Waste and Emergency Response, where appropriate, improve site profiles in EPA's public Superfund Web site to accurately depict EPA and state actions taken to protect human health and the environment.

3 EPA Should Continue Efforts to Reduce Unliquidated Obligations in Brownfields Pilot Grants

EPA, Office of Inspector General

The OIG sought to determine whether EPA has been using funds in a timely manner for Brownfields pilot projects, and whether funds were available for deobligation.

EPA has not consistently implemented a national policy or process that provides reasonable assurance that Brownfields grant funds will be spent in a timely manner. EPA Headquarters has not provided specific guidelines on when grants should be terminated, nor has it defined inadequate progress for grant performance. Regions have generally allowed time extensions when grantees requested them.

The OIG recommends that the Assistant Administrator for OSWER establish a process for reviewing non-performing grants, and develop procedures for terminating and deobligating funds from those grants. The OIG recommended using the term "insufficient progress" in grant assessments and that the Regions deobligate remaining funds for 21 grants that are scheduled to end by September 30. 2008.

3 EPA Needs to Track Compliance with Superfund Cleanup

EPA, Office of Inspector General

The OIG evaluated whether EPA has resolved violations to Superfund enforcement instruments consistent with its guidance, practice, and authorities.

According to EPA's Superfund information system, there were 3,397 active Superfund enforcement instruments to ensure cleanups at NPL sites as of September 30, 2007. Yet EPA does not nationally compile or track data on substantial non-compliance with the terms or requirements of these instruments.

The OIG recommends that EPA track and monitor substantial non-compliance by using and modifying, as appropriate, the existing Superfund information system. It was also recommended that EPA establish enforceable response actions to address contamination from the Muskego Landfill

### **Findings**

#### Recommendations

Site.

4 Millions of Federal Dollars Remain for Colonias Projects (Report No. 08-P-0184)

EPA, Office of Inspector General

The OIG conducted an audit of the Colonias Wastewater Treatment Assistance Program (CWTAP) because of a large unliquidated obligation balance in the program. The audit objective was to answer the following question: "Has EPA provided the oversight necessary to ensure that the Texas Water **Development Board manages** CWTAP grants so that funds are drawn properly and projects are completed on time?" The OIG reviewed EPA's CWTAP grants to the Board, reviewed the amounts paid to the Board for grant expenses, and interviewed EPA and Board managers and staff members. The OIG visited Board offices in Austin. Texas. in September 2007, and reviewed a sample of project files. The OIG performed the work in accordance with generally accepted government auditing standards, issued by the Comptroller General of the United States. The OIG conducted field work from September to December 2007. For additional details on scope and methodology, see Appendix A of the report.

The Colonias program needs to improve the timeliness of CWTAP fund disbursements.

EPA's Regional Office 6 should:

- Amend the workplans and/or operating agreements for the open CWTAP grants to include specific projects, schedules, and dollar amounts.
- Develop and implement a policy, similar to what is contained in the Office of the Chief Financial Officer's (OCFO's) 2007 EPA Policy for the U.S.-Mexico Border Program, that specifies a process for taking corrective actions when projects are delayed.

4 Improvements Needed to Ensure Grant Funds for U.S.-Mexico Border Water Infrastructure Program Are Spent More Timely (Report No. 08-P-0121)

EPA, Office of Inspector General

The OIG evaluated the U.S.-Mexico Border Program to From 2005 to 2007, EPA took actions to implement timeframes for Border Program projects, reduce the scope of projects, and reduce unliquidated obligations of projects. However, EPA needs to make additional changes to the process it uses to manage the funds Congress appropriates for water infrastructure improvements along the

The OIG recommends that:

 The OCFO clarify its August 2007 policy for the U.S.-Mexico Border Program to specify the actions EPA will take when the fund balance reaches the \$140-

assess the controls for obligating and using water infrastructure grant funds. The OIG reviewed program internal controls and interviewed EPA personnel at Headquarters and in EPA Regional offices 6 and 9. OIG examined grant prioritization lists, project data and work plans, program appropriations, NADBank financial reports, and other information.

### **Findings**

U.S.-Mexico Border. EPA managers provide grant funds in advance to ensure that funds are available to build projects once planning is completed. EPA staff feel pressure to obligate money to avoid a reduction in program funding. If this continues, between \$34 and \$57 million of the funds Congress appropriated for the program in FY 2007 and 2008 will not be needed until FY 2010 or beyond.

#### Recommendations

- million threshold of concern.
- Regions 6 and 9
   require the U.S.-Mexico
   Border program to
   complete planning and
   design of projects
   before EPA awards any
   grant funds to
   NADBank for
   construction of the
   projects.
- The Office of Water (OW), in conjunction with Regions 6 and 9, prepare a plan to expeditiously use U.S.-Mexico Border Program funds for other projects with unobligated money.
- The OCFO and OW adjust future budget requests for the U.S.-Mexico Border Program to reflect funds that have not been obligated in future years.
- Regions 6 and 9
   prepare grant work
   plans that include
   specific projects,
   measures, milestones,
   and detailed budgets to
   be achieved with grant
   funds.

4 Border 2012 Program Needs to Improve Program Management to Ensure Results

EPA, Office of Inspector General

The OIG examined the impact of Border 2012's program management and organization on its ability to protect the environment and public health in the U.S.-Mexico border region.

The OIG found that the current organizational structure of the Border 2012 Program allows it to achieve a collaborative relationship at the U.S.-Mexico border and address environmental and public health issues unique to the border region. The structure also creates opportunities for stakeholder involvement from local, state, and national groups while providing the program with the ability to create an effective mechanism to discuss border issues.

The OIG recommended that EPA strengthen management controls to effectively demonstrate program performance and that the Agency develop a strategic plan, issue guidance to better support program results, improve performance measures, and develop criteria for determining what constitutes successful completion of program

### **Findings**

#### Recommendations

goals.

4 Framework for Developing Tribal Capacity Needed in the Indian General Assistance Program

EPA, Office of Inspector General

The OIG sought to determine whether the EPA's Indian General Assistance Program (IGAP) has been effective in developing tribal capacity to implement environmental programs.

EPA often uses the target funding level of \$110,000 as the basis for IGAP funding instead of considering environmental capacity needs and prior progress. EPA and tribes consider IGAP funding to be essential continuing support for tribal environmental programs. When the funding is not based on tribal capacity needs or priorities, EPA cannot demonstrate that the highest human health and environmental needs are addressed.

The OIG recommends that:

- The American Indian Environmental Office develop and implement an overall framework for achieving capacity, including valid performance measures for each type of tribal entity, and help the Regions incorporate the framework into the IGAP work plans.
- EPA Regional offices negotiate with tribes to develop environmental plans that reflect intermediate and longterm goals, link those plans to annual IGAP work plans, and measure tribal progress in meeting plans and goals.
- Revise how IGAP funding is distributed to tribes to place more emphasis on tribes' prior progress, environmental capacity needs, and long-term goals.

4 EPA Should Continue to Improve Its National Emergency Response Planning

EPA, Office of Inspector General

The OIG evaluated EPA's Emergency Response Business Plan and sought to determine how the Agency estimated resource needs for national emergencies, how the resource estimates considered the use of state and local government agency resources in national

The OIG found that EPA's Emergency Response Business Plan did not disclose the basis for EPA's resource estimates. Additionally, EPA management stated that they did not consider state and local resources in their estimates because they believed they would be working with the affected state and local governments in a unified command structure.

The OIG recommends that EPA revise the Plan to incorporate the methodology and assumptions used to develop all personnel and resource estimates, the rationale for the selection of the incidents of national significance, lessons learned from past incidents, logistics of resource deployment, and risk communications.

**Findings** 

#### Recommendations

emergencies, and how EPA used existing data on chlorine volumes to guide plans for responding to a chemical attack.

4 Wetland Program Development Grants: Assessing Their Role in State Tribal Wetland Programs

Indtai, Inc.

Indtai evaluated the effectiveness of the Wetland Program Development Grants (WPDGs) in helping states/tribes to build their wetland programs.

Small programs are more dependent on WPDGs, but get fewer grants with less funding per grant than larger programs. Small program are very dependent on WPDGS overall. Unpredictability of grant awards inhibit long-term planning for small programs, which often must greatly ratchet down activity in years they do not receive grants. Some grants do not actually help build programs. Having a strategic plan leads to more effective program building.

Consider base (i.e., noncompetitive) funding, longer grant duration, better feedback on grant reports, set-asides for smaller programs, better definition of criteria EPA wants state/tribes to achieve within core elements.

4 Despite Progress, EPA Needs to Improve Oversight of Wastewater Upgrades in the Chesapeake Bay Watershed (Report No. 08-P-049)

EPA, Office of Inspector General

The OIG sought to determine how well EPA is assisting its Chesapeake Bay partners in cleaning up the Bay. The report evaluates the progress in controlling discharges from wastewater treatment facilities. Chesapeake Bay wastewater treatment facilities risk not meeting the 2010 deadline for nutrient reductions if key facilities are not upgraded in time. In the seven years since signing the Chesapeake 2000 agreement, EPA and its state partners have taken a number of steps to lay the foundation for achieving wastewater nutrient reduction goals. Water quality standards have been set, nutrient loadings have been allocated, and nutrient limits are beginning to be incorporated into permits. However, states need to finish adding nutrient limits to the permits, and the facilities will need to make significant reductions in the three years remaining before the deadline. Crucially, these reductions will need to be maintained once achieved. Significant challenges include generating sufficient funding and addressing continuing population growth. EPA needs to better monitor progress to ensure that needed upgrades occur on time and loading reductions are achieved and maintained. Otherwise, Bay waters will continue to be impaired, adversely affecting living resources throughout the ecosystem that supports commercial and recreational uses. It would not be practical or cost-effective to obtain additional reductions from wastewater treatment facilities to compensate for

The EPA Region 3 Regional Administrator should work with the states to establish interim construction milestones for priority facilities, monitor milestone and financial funding progress for these facilities, and continue efforts to develop effective and credible water quality trading programs. The Regional Administrator also should have EPA and states continue to evaluate industrial discharges and refine industrial nutrient cap loads where appropriate. For additional information, refer to www.epa.gov/oig/reports/ 2008/20080108-08-P-0049.pdf.

### **Findings**

#### Recommendations

goals not being met in other areas.

4 EPA Needs to Better Report Chesapeake Bay Challenges: A Summary Report (Report No. 08-P-0199)

EPA, Office of Inspector General

This review summarizes and adds to several evaluations conducted by the OIG in response to a congressional request. It evaluates how well EPA is working with its Chesapeake Bay partners in cleaning up the Bay.

Despite many noteworthy accomplishments by the Chesapeake Bay partners, the Bay remains degraded. This has resulted in continuing threats to aquatic life and human health and citizens being deprived of the Bay's full economic and recreational benefits. Through its reporting responsibilities, EPA could better advise Congress and the Chesapeake Bay community that 1) the Bay program is significantly short of its goals and 2) partners need to make major changes if goals are to be met. Current efforts will not enable partners to meet their goal of restoring the Bay by 2010. Further, new challenges are emerging. Bay partners need to address: uncontrolled land development, limited implementation of agricultural conservation practices, and limited control over air emissions affecting Bay water. EPA does not have the resources, tools, or authorities to fully address all of these challenges. Farm policies, local land development decisions, and individual lifestyles have huge impacts on the amount of pollution being discharged to the Bay. EPA needs to further engage local governments and watershed organizations in efforts to clean up the Bay.

The OIG recommends that the EPA Administrator improve reporting to Congress and the public on the actual state of the Chesapeake Bay and actions necessary to improve its health. The OIG also recommends that the Administrator develop a strategy to further engage local governments and watershed organizations to capitalize on their resources, tools, authorities, and information to advance the mission of the Chesapeake Bay Program, and provide the Program Office with the opportunity to comment on proposed rulemaking related to pertinent air issues. EPA concurred with all of the recommendations in this report.

4 Assessment of the Performance Measures Improvement Project

U.S. Department of the Treasury, Federal Consulting Group (FCG)

FGC conducted the assessment and provided findings in the context of the Malcolm Baldrige Criteria for Performance Excellence. Areas addressed include strategic planning, performance measurement, workforce focus, process management, leadership, and customer focus.

The inclusion of the Office of Pesticide Programs (OPP) outcome measures in the Agency Strategic Plan has resulted in greater internal alignment within OPP and a focus on key mission areas. All senior executives have the outcome measures in their annual performance plans and many have included them in their staffs' plans. The outcome measures provide a mechanism and a framework to better communicate with the public and stakeholders.

In order to give more balance to the overall measurement system, it is suggested that OPP expand the list of OPP performance measures to include employee-related measures (retention, satisfaction, and training), stakeholder and customer satisfaction measures, and financial measures.

### **Findings**

#### Recommendations

4 Review of the Office of Research and Development's Human Health Risk Assessment Program (HHRA) at the U.S. Environmental Protection Agency

EPA, Board of Scientific Counselors

This evaluation reviewed the Human Health Risk Assessment Program's relevance, structure, performance, quality, leadership, coordination and communication, and outcomes.

The Program's goals are fully consistent with the Agency's strategic mission and with the Program's multi-year plan. Products from two LTGs are critical to EPA's regulatory mission and form the foundation for regulatory decisions and policies in a variety of program offices and regions. The Program has a comprehensive and logical framework for producing high-quality risk assessments and for managing internal and external review processes, is internationally recognized as a leader in risk assessment methods development and implementation, has done an excellent job of engaging scientists and managers in its planning, and has very high quality risk assessments and research. Outcome measures are extremely welldefined for each LTG. The BOSC rated two LTGs as "Meets expectations" and one LTG as "exceeds expectations."

Follow-up recommendations resulting from this review included:

- Capture the responsiveness of the staff members to national emergencies and the HHRA Program's contributions to particularly difficult cleanup sites in annual performance goals.
- Improve the IRIS
  (Integrated Risk
  Information System)
  program and PPRTV
  (Provisional PeerReviewed Toxicity
  Values) process,
  including increasing the
  number of IRIS
  assessments
  completed each year,
  and making the
  prioritization process for
  IRISs and PPRTVs
  transparent.
- Ensure transparency of decisions made in the process of performing ISAs (Integrated Science Assessments).

4 Mid-Cycle Review of the Office of Research and Development's Endocrine Disrupting Chemicals Research Program (EDRP) at the U.S. Environmental Protection Agency

EPA, Board of Scientific Counselors

BOSC "mid-cycle" reviews are designed to gauge the program's progress with respect to 1) its future direction, and 2) performance and accountability. While narrower in focus than the in-depth technical evaluation that

The EDRP has been very responsive to the recommendations of the 2004 BOSC program review. Most of the recommendations were implemented; budget constraints prevented some recommendations from being implemented. The updated draft MYP is very logical and provides a coherent framework for addressing priority research needs. The metrics being used to assess progress are appropriate, but the BOSC recommended additional metrics be developed. The BOSC did not identify any research gaps or additional needs for the program, and encourages the program to further enhance the Agency's leadership role in risk

Recommendations include:

- EDRP is encouraged to develop and improve ongoing programs.
- Epidemiological studies should continue to be partnered with other Agencies.
- Carefully consider new metrics in the context of budget, FTEs, and the amount of time a particular activity has been underway.
- Develop additional

constitutes a full BOSC program review, the mid-cycle review provides the program with critical information on its progress to date.

### **Findings**

management. The BOSC rated the overall progress of the EDRP program as Exceeds Expectations.

#### Recommendations

metrics that a) assess how the research outcomes are being used in decision making; and b) assess the level of collaboration and/or interaction between members of the EDRP with other agencies, academia, industry, and in the international community.

- The program is encouraged to a) continue its ongoing evaluation and planning activities; and b) take on an even more visible leadership role in risk management.
- EPA should consider more harmonization with other regulatory agencies regarding the results of EDC scientific studies and their application for risk assessment.
- If any extramural funds become available, the program should use them for cooperative agreements.

4 Mid-Cycle Review of the Office of Research and Development's Global Change Research Program (GCRP) at the U.S. Environmental Protection Agency

EPA, Board of Scientific Counselors

BOSC "mid-cycle" reviews are designed to gauge the program's progress with respect to 1) its future direction and 2) performance and accountability. While narrower in focus than the in-depth technical evaluation that constitutes a full BOSC program

The BOSC reaffirms that, in general, the GCRP is doing the "right work" and doing it "well." Among its accomplishments, the GCRP's shift in focus toward a more national perspective and its reorganization of its programmatic areas—fundamental recommendations of the 2006 report—have been accomplished fully and effectively. The BOSC judged that GCRP managers made the correct decisions from a national perspective in their use of resources and therefore decided on an "exceeds expectations" rating for the Program's progress since its last BOSC program review.

Follow-up recommendations to the review included 1) the need to constrain GCRP activities to its mission and 2) the adequacy of resources to accomplish even that limited mission. The annual performance measures listed under annual performance goal (APG) 1 should be broader in geographic scope to be considered truly national (e.g., assessments of representative watersheds

**Findings** 

#### Recommendations

review, the mid-cycle review provides the program with critical information on its progress to date.

in different regions of the United States). Of greater concern to the BOSC is the absence of the allimportant coherent "story" of what the GCRP intends to produce for the environment. The BOSC recommends that the GCRP include both intramural and extramural elements in this task, and devote substantially more resources to both. The final recommendation that requires additional effort from the GCRP is to facilitate the "harvest" from prior and current activities.

5 EPA Has Initiated Strategic
Planning for Priority Enforcement
Area, But Key Elements Still
Needed

EPA, Office of Inspector General

The purpose of the evaluation was to determine how well EPA planned for success in its national enforcement priority areas. The evaluation focused on the air toxics, mineral processing, and combined sewer overflow national priorities.

The Office of Enforcement and Compliance Assurance has instituted a process for strategic planning in its national enforcement priority areas. It has developed strategic planning guidance and a strategy template to facilitate continual review and improvement of the strategies. However, each of the plans is missing key elements to monitor progress and accomplishments and efficiently utilize Agency resources. All three strategies lack a full range of measures to monitor progress and achievements. Two strategies lack detailed exit plans. Additionally, the combined sewer overflow strategy does not address the states' key roles in attaining the strategy's overall goal. The absence of these elements hinders the Office from monitoring progress and achieving desired results in a timely and efficient manner.

EPA should issue a policy requiring national priority strategy documents to include a full range of output and outcome performance measures with targets and timeframes, an exit plan, and clear roles for states. EPA should also develop a cost-effective methodology for measuring resource inputs under the national priorities.

5 EPA's Execution of Its Fiscal Year 2007 New Budget Authority for the Enforcement and Compliance Assurance Program in Regional Offices

Government Accountability

GAO found that EPA obligated 72% of resources reviewed for civil enforcement, compliance assistance, compliance incentives, and compliance monitoring programs under the EPM appropriation in FY 2007 to Regional offices with only small differences in obligations reported

The report recommends identifying reliable key workload indicators that drive resource needs to inform resource allocation decisions.

### **Findings**

#### Recommendations

Office

The GAO report examines EPA's FY 2007 budget execution process at the request of a Congressional appropriations committee. GAO examined fund allocation in enforcement and compliance assurance program operating plans under the **Environmental Programs and** Management (EPM) appropriation within EPA's Regional offices. It also examined individual projects for regional enforcement and compliance assurance, civil enforcement, compliance assistance, compliance incentives and compliance monitoring programs.

by EPA Headquarters and regional offices. The report states that EPA lacks the information to guide a systematic approach to resource allocation in Regional offices.

5 Review of the Office of Research and Development's Science and Technology for Sustainability Research Program (STS) at the U.S. Environmental Protection Agency

EPA, Board of Scientific Counselors

This evaluation reviewed the STS Research Program's relevance, structure, performance, quality, leadership, coordination and communication, and outcomes.

The People, Prosperity, and the Planet (P3); Small Business Innovation Research (SBIR); and Environmental Technology Verification (ETV) Programs all have been highly relevant to EPA's mission and the elements in these programs should be preserved whenever possible. The life cycle assessment (LCA) programs, metrics, and procedures developed under the Pollution Prevention and New Technologies (P2NT) Research Program are relevant and important to the goals of EPA, stakeholders, and the international community. The STS Research Program is positioned to move these initiatives forward and is encouraged to build on this strength. The Program meets or exceeds expectations in achieving its LTGs relative to tools and technology development and their adoption. The creation and adoption of metrics for quantitative assessment of sustainability is in too early a stage for qualitative ranking at the time of review, but every indication is that the excellent research being conducted in the STS Research Program will contribute strongly to that goal.

Follow-up recommendations resulting from this review included suggestions to:

- Develop a clear definition of sustainability and a framework for its application to a broad range of human activities.
- Develop, use, and apply metrics for sustainability across LTGs.
- Develop an outline for how metrics for sustainability will be developed. This should include criteria for assessing the utility and predictability of metrics.
- Improve decision tools through targeted extramural collaboration, and reach a wider set of stakeholders.
- · Consider redirecting the

### **Findings**

#### Recommendations

Green Technology Program or replacing it with an extramural grants program, because the relevance and impact of this program is less apparent (assess if it is serving a function not being met by the private sector and academia).

5 Evaluating the Effectiveness of EPA's PPIN Grant Program

Abt Associates

Abt evaluated the effectiveness of the Pollution Prevention Resource Exchange Network centers in providing technical assistance to states, local governments, technical assistance providers, and businesses.

The Pollution Prevention Resource Exchange network provides direct and indirect technical assistance through eight centers, dedicated to increasing the adoption of pollution prevention by improving the dissemination of relevant information. The centers provide pollution prevention information, networking opportunities, and other services to states, local governments, technical assistance providers, and businesses. The study found that the centers interact, strengthening the ability of individual centers to provide technical assistance. The centers have strong and constructive relationships within their regions and the national network allows each center to deliver more and better information to their customers.

Many of the recommendations describe how to strengthen the measurement of shortterm, intermediate, and long-term outcomes for the PPIN grant program. For example, the centers should develop standard protocols to be used for follow-up with their target audience to determine if approaches are effective at making change happen. Follow-up with customers should be an intrinsic part of the activity for maximum resource efficiency.

ESP EPA Should Further Limit Use of Cost-Plus-Award-Fee Contracts

EPA, Office of Inspector General

To determine whether EPA used award fee plans for Cost-Plus-Award-Fee (CPAF) contracts that clearly identified the specific award fee criteria and properly established performance indicators; achieved a higher level of performance by using this contract type; and sufficiently reviewed, approved, and awarded fees.

Developing and administering CPAF contracts is a labor-intensive process, and many EPA employees involved with contract management believe that competition is a more effective way to motivate contractors. The OIG found that the calculation used to compute base fees on these contracts is overly complex, and eliminating the requirement for contractors to submit self-evaluations could save up to \$50,000 over the course of a contract.

The OIG recommends that EPA further limit the use of CPAF contracts by revising the Contracts Management Manual to require that a cost-benefit analysis be conducted before a CPAF contract is awarded. When CPAF contracts are used, the OIG recommends that EPA better document the basis for performance ratings given. EPA should also modify its contracts to bring them into compliance with the EPA Acquisition Regulation to

**Findings** 

### Recommendations

avoid the future overpayment of base fees.