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Introduction and Overview

EPA's Mission

The mission of the Environmental Protection Agency (EPA) is to protect and safeguard human health and the environment, with a new focus on collaboration and partnerships with our Geographic and Regional partners. This

budget supports the Administration's commitment to environmental results – increasing the pace of improvement and identifying new and better ways to carry out our mission.

Annual Performance Plan and Congressional Justification Overview

The EPA's FY 2006 Annual Performance Plan and Congressional Justification requests \$7.6 billion in discretionary budget authority and 17,631 Full Time Equivalents (FTE). This request reflects the Agency's efforts to work with its partners toward protecting air, water, and land, as well as providing for EPA's role in safeguarding the Nation from terrorist acts. The request echoes the Administration's commitment to setting high environmental protection standards, while focusing on results and performance, and achieving goals outlined in the President's Management Agenda.

Goal 1: Clean Air and Global Climate Change

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

The FY 2006 EPA President's Budget implements the Clean Air and Global Climate Change goal through national programs designed to provide healthier outdoor and indoor air for all Americans, protect the stratospheric ozone layer, minimize the risks from radiation releases, reduce greenhouse gas intensity, and enhance science and research. EPA's

key clean air programs – particulate matter, ozone, acid rain, air toxics, indoor air, radiation and stratospheric ozone depletion – address some of the highest health and environmental risks faced by the nation.

EPA's strategy for achieving clean outdoor air includes a comprehensive, multi-pollutant approach that combines national and local measures, with implementation responsibilities carried out by the most appropriate and effective level of government. To address the high priority of reducing nitrogen oxides and sulfur dioxide emissions, the Agency continues to promote the enactment of the Clear Skies legislation that the Administration submitted to Congress in 2002. Although Clear Skies is the more comprehensive and cost effective approach and therefore the strongly preferred solution, the Administration is also pursuing a regulatory path that would achieve many of the same benefits should legislation not be enacted. EPA has proposed the Clean Air Interstate Rule (CAIR) which regulates the transport of power plant emissions of SO₂ and NO_x across state lines via a market-based approach similar to Clear Skies and the existing Acid Rain program. Clean fuels and clean technologies are also an integral part of reducing emissions from mobile sources. The FY 2006 President's Budget provides \$15.0 million for the Clean Diesel Initiative.

EPA and a coalition of clean diesel interests will work together to expand the retrofitting of diesel engines into new sectors by adopting a risk-based strategy, targeting key places and working with specific use sectors to identify opportunities to accelerate the adoption of cleaner technologies.

EPA's Climate Protection Programs will continue to contribute to the President's 18 percent greenhouse gas intensity reduction goal by 2012. A FY 2006 funding initiative for the Climate Change Program is the Methane to Markets Partnership – a U.S. led international initiative that promotes cost-effective, near-term methane recovery and use as a clean energy source. The program provides for the development and implementation of methane projects in developing countries and countries experiencing economic transition.

Goal 2: Clean and Safe Water

Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

The FY 2006 EPA President's Budget implements the Clean and Safe Water goal through programs designed to provide improvements in the quality of surface waters and drinking water. In FY 2006, EPA will work with States and tribes to continue to accomplish measurable improvements in the safety of the nation's drinking water, and in the conditions of rivers, lakes, and coastal waters. With the help of these partners, EPA expects to make significant progress in these areas, as well as support a few more focused water initiatives.

During FY 2006, EPA, the States, and community water systems will build on

past successes while working toward the FY 2008 goal of assuring that 95 percent of the population served by community water systems receives drinking water that meets all applicable standards. To help ensure that water is safe to drink, the FY 2006 President's Budget requests \$850 million for the Drinking Water State Revolving Fund.

In FY 2006, EPA will work with States to make continued progress toward the clean water goals to implement core clean water programs, including innovations that apply programs on a watershed basis, and to accelerate efforts to improve water quality on a watershed basis. To protect and improve water quality, a top priority is to continue to support water quality monitoring. The Agency's request expands the monitoring initiative begun in FY 2005 to establish a nationwide monitoring network and expand the baseline water quality assessment to lakes and streams. The initiative will allow EPA to establish scientifically defensible water quality data and information essential for cleaning up and protecting the Nation's waters. To support sustainable wastewater infrastructure, EPA will continue to provide annual capitalization to the Clean Water State Revolving Funds (CWSRF). The budget will allow EPA to meet the Administration's Federal capitalization target of \$6.8 billion total for 2004 – 2011 and enable the CWSRF to eventually revolve at a level of \$3.4 billion.

Goal 3: Land Preservation and Restoration

Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by release of harmful substances.

The FY 2006 President's Budget implements the Land Preservation and

Restoration goal through continued promotion of the Land Revitalization Initiative, first established in 2003. Revitalized land can be used in many beneficial ways, including the creation of public parks, the restoration of ecological systems, the establishment of multi-purpose developments, and the establishment of new businesses. Regardless of whether a property is an abandoned industrial facility, a waste disposal area, a former gas station, or a Superfund site, this initiative helps to ensure that reuse considerations are fully integrated into all EPA cleanup decisions and programs. Through the One Clean-up Program, the Agency will also work with its partners and stakeholders to enhance coordination, planning and communication across the full range of Federal, State, Tribal and local clean-up programs to promote consistency and enhanced effectiveness at site cleanups.

Enforcement activities are also critical to the Agency's ability to clean up the vast majority of the nation's worst hazardous sites, by securing funding from Potentially Responsible Parties (PRPs). The Agency will continue to encourage the establishment and use of Special Accounts within the Superfund Trust Fund to finance cleanups. These accounts segregate site-specific funds obtained from responsible parties that complete settlement agreements with EPA. These funds create an incentive for other PRPs to perform work they might not be willing to perform or used by the Agency to fund clean up. The result is the Agency can clean up more sites and preserve appropriated Trust Fund dollars for sites without viable PRPs.

The FY 2006 President's Budget funds the Superfund Appropriation at \$1.3 billion. Within this total, the Superfund Remedial Program provides significant resources in EPA's effort to preserve and restore land to productive use. In FY 2006,

EPA anticipates completing construction of remedies at 40 Superfund sites.

The FY 2006 President's Budget will also continue to promote the minimization of waste. Through the Resource Conservation Challenge, a national effort has been launched to challenge every American to prevent pollution and promote recycling and reuse, and conserve energy and materials. In FY 2006, EPA's municipal solid waste program will implement a set of coordinated strategies, including source reduction (also called waste prevention), recycling (including composting), combustion with energy recovery, and landfilling.

Goal 4: Healthy Communities and Ecosystems

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

The FY 2006 President's Budget implements the Healthy Communities and Ecosystems goal through a blend of regulatory, voluntary and incentive-based programs. Some environmental issues are best resolved through multi-media, multi-stakeholder approaches. The Healthy Communities and Ecosystems goal seeks to reduce risks through community and geographically based programs: Brownfields, Wetlands protection, and our nation's great water bodies programs such as the Great Lakes, Gulf of Mexico and Chesapeake Bay. Another focus is on ensuring safer chemicals and pesticides, which impact all media. FY 2006 will be a key year for the chemicals and pesticides programs as the Agency works to complete the final milestone in the ten-year pesticide tolerance reassessment program, which ensures older food-use pesticides meet the latest scientific standards for safety. Core research in this goal provides the scientific

basis for EPA's human health and ecosystem programs and explores cutting-edge issues that may become the problems, or the solutions, of future environmental protection.

In FY 2006, vital community restoration of abandoned contaminated properties will remain a priority as the Brownfields program continues at \$210 million. The Great Lakes program will meld multi-media and multi-stakeholder efforts to remedy pollution, with the Great Lakes Legacy program increasing to \$50 million to remediate sediment contaminated by improperly managed old industrial chemicals. Toxic chemicals reduction is also the emphasis of Community Action for a Renewed Environment projects, with an increase of \$7 million, which will offer many more communities the opportunity to improve their environment through voluntary action. In the research area, over \$5 million is requested for the Advanced Monitoring Initiative to combine information technology with remote sensing capabilities, to allow faster, more efficient response to changing environmental conditions such as forest fires or storm events, as well as current ecosystems stressors in sensitive areas such as the Great lakes or the Everglades.

Goal 5: Compliance and Environmental Stewardship

Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that promote environmental stewardship.

The FY 2006 President's Budget implements the Compliance and Environmental Stewardship goal through

technical assistance and education, inspection and enforcement; encouraging innovation and pollution prevention; and through capacity-building and support for tribal environmental programs. Compliance assistance and enforcement are critical components of environmental protection. EPA supports the regulated community by assuring requirements are clearly understood, and by helping industry identify cost-effective compliance options. Compliance is maximized through assistance and incentives, and enforcement.

In 2004, the Agency achieved over one billion pounds in pollutant reduction through enforcement actions. In FY 2006 EPA will further refine its 'smart enforcement' strategy that combines inspection, enforcement and compliance assistance strategies. The EPA will assist the regulated community in understanding and complying with environmental laws and regulations, and will reduce noncompliance through inspections, monitoring and ultimately through enforcement, where needed. The Agency will respond to complaints from the public; strive to secure a level economic playing field for law-abiding companies; and deter future violations.

The agency also works to improve and encourage pollution prevention and sustainable practices, helping industry move beyond compliance and become partners in protecting our national resources and our citizens' health. EPA works with manufacturers to increase energy efficiency, find environmentally preferable substitutes for chemicals of concern, and change processes to reduce toxic waste. Innovative front end approaches also support state- and tribal-level efforts to reduce pollution, leverage technology and increase communication through data sharing and collaboration.

In FY 2006 EPA will continue to work with industrial sectors to set pollution reduction goals, provide tools and technical assistance, and identify innovative strategies to reduce risks. In the tribal GAP program, the Agency will support approximately 510 federally recognized Tribes in assessing environmental conditions on their lands and building environmental programs tailored to their needs. In addition, the tribal program is looking to information technology solutions and will integrate 10 existing Agency data systems in using common Identifier codes and data standards in 2006.

Homeland Security

Homeland security is a top priority for EPA and the nation. EPA plays a lead role in protecting U.S. citizens and the environment from the effects of attacks that release chemical, biological or radiological agents. Following the cleanup and decontamination efforts of 2001, the Agency has focused on ensuring we have the tools and protocols needed to detect and recover quickly from deliberate incidents. The emphasis for FY 2006 is on several areas: decontamination of threat agents, protecting our water and food supplies, and ensuring trained personnel and key lab capacities are in place to be drawn upon in the event of an emergency.

In FY 2006, the Agency request includes substantial new resources for these efforts. \$44 million will support deployment of Water Sentinel, a pilot monitoring and surveillance program that will promote early warning of intentional contamination events in drinking water systems. Critical tools, training, and exercises will complement this project, in collaboration with State, local communities and water utilities. The program includes resources to create the Water Alliance for Threat Reduction to train and prepare our nation's drinking water systems operators.

Response to terrorist events calls for decontamination from many new hazards. Environmental decontamination research and preparedness response will increase by \$19.4 million and an additional \$4 million is requested for the Safe Buildings research program. To support EPA's water security and decontamination programs, new resources (\$11.6 million) are also requested for Environmental Laboratory Preparedness and Response (ELPR) activities. ELPR will plan for certain fundamental laboratory network needs, such as, (1) identification of labs, (2) appropriate connectivity between member labs, (3) standardized methods and measurements for environmental samples of terrorism-related agents of concern, (4) training and continuing education for member laboratories, (5) accreditation and accountability.

Workforce

EPA values its world class workforce and its expertise enables us to meet our urgent responsibilities across a broad range of national and local environmental issues. In 2006 we are making a modest adjustment to EPA's workforce management strategy that will help us better align resources, skills, and Agency priorities. A key step in this adjustment is improving the alignment between the total number of positions authorized and on actual FTE utilization. As such, EPA is reducing its Agency authorized FTE base by approximately 300 positions to 17,631, which is still above our current employee base and consistent with the Agency's historic FTE levels. The result of these reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs and will not result in overall change in the numbers of FTE at EPA. The program project descriptions provided later in this document, provide the details of these changes.

Resource Tables

APPROPRIATION SUMMARY

Budget Authority / Obligations

(Dollars in Thousands)

| | <u>FY 2004 Obligations</u> | <u>FY 2005 Pres. Bud.</u> | <u>FY 2006 Request</u> |
|------------------------------------|--------------------------------|-------------------------------|----------------------------|
| Science & Technology | \$758,075.4 | \$689,185.0 | \$760,640.0 |
| Environmental Program & Management | \$2,223,528.1 | \$2,316,958.0 | \$2,403,764.0 * |
| Inspector General | \$36,785.0 | \$37,997.0 | \$36,955.0 |
| Building and Facilities | \$43,871.0 | \$42,918.0 | \$40,218.0 |
| Oil Spill Response | \$17,455.1 | \$16,425.0 | \$15,863.0 |
| <i>Superfund Program</i> | \$1,276,070.4 | \$1,332,133.8 | \$1,235,192.1 |
| <i>IG Transfer</i> | \$14,426.1 | \$13,138.6 | \$13,536.0 |
| <i>S&T Transfer</i> | \$74,451.9 | \$36,143.6 | \$30,604.9 |
| Hazardous Substance Superfund | \$1,364,948.4 | \$1,381,416.0 | \$1,279,333.0 |
| Leaking Underground Storage Tanks | \$73,372.4 | \$72,545.0 | \$73,027.0 |
| State and Tribal Assistance Grants | \$3,908,696.0 | \$3,231,800.0 | \$2,960,800.0 |
| TOTAL, EPA | \$8,426,731.4 | \$7,789,244.0 | \$7,570,600.0 * |

* The FY 2006 President's Budget includes \$50M to be derived from changes to Toxics and Pesticides fees proposed in subsequent legislation.

APPROPRIATION SUMMARY

Full-time Equivalents (FTE)

| | <u>FY 2004 Obligations</u> | <u>FY 2005 Pres. Bud.</u> | <u>FY 2006 Request</u> |
|------------------------------------|--------------------------------|-------------------------------|----------------------------|
| Science & Technology | 2,424.2 | 2,460.5 | 2,438.1 |
| Science and Tech. - Reim | 2.7 | 3.0 | 3.0 |
| Environmental Program & Management | 10,985.2 | 11,271.0 | 11,048.1 |
| Envir. Program & Mgmt - Reim | 49.0 | 1.5 | 1.5 |

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request |
|---|--------------------------------------|-------------------------------------|----------------------------------|
| Inspector General | 259.0 | 271.6 | 267.7 |
| Oil Spill Response | 89.0 | 100.0 | 99.2 |
| Oil Spill Response - Reim | 6.3 | 0.0 | 0.0 |
| <i>Superfund Program</i> | 3,082.3 | 3,128.8 | 3,131.2 |
| <i>IG Transfer</i> | 101.4 | 94.1 | 94.1 |
| <i>S&T Transfer</i> | 138.2 | 129.8 | 106.3 |
| Hazardous Substance Superfund | 3,321.9 | 3,352.7 | 3,331.6 |
| Superfund Reimbursables | 87.7 | 77.5 | 77.5 |
| Leaking Underground Storage Tanks | 74.2 | 79.3 | 77.4 |
| FEMA - Reim | 5.8 | 0.0 | 0.0 |
| WCF-REIMB | 95.6 | 99.7 | 99.7 |
| Rereg. & Exped. Proc. Rev Fund | 187.4 | 187.2 | 187.2 |
| Pesticide Registration Fund | 22.9 | 0.0 | 0.0 |
| TOTAL, EPA | 17,610.9 | 17,904.0 | 17,631.0* |

* Agency Authorized FTE levels are being aligned with actual utilization. See overview section.

Goal and Objective Overview

GOAL, APPROPRIATION SUMMARY

Budget Authority / Obligations

(Dollars in Thousands)

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request |
|---|--------------------------------|-------------------------------|----------------------------|
| Clean Air and Global Climate Change | \$932,373.4 | \$1,011,027.3 | \$968,882.7 |
| Environmental Program & Management | \$446,488.0 | \$474,140.0 | \$487,626.0 |
| Science & Technology | \$210,745.0 | \$205,636.0 | \$210,821.0 |
| Building and Facilities | \$9,563.0 | \$9,604.0 | \$8,842.0 |
| State and Tribal Assistance Grants | \$257,744.0 | \$312,750.0 | \$252,750.0 |
| Inspector General | \$4,641.0 | \$5,715.0 | \$5,459.0 |
| Hazardous Substance Superfund | \$3,193.0 | \$3,182.0 | \$3,385.0 |
| | | | |
| Clean and Safe Water | \$3,810,107.5 | \$2,944,875.7 | \$2,813,028.3 |
| Environmental Program & Management | \$480,422.0 | \$484,351.0 | \$466,863.0 |
| Science & Technology | \$134,224.0 | \$102,189.0 | \$155,305.0 |
| Building and Facilities | \$6,410.0 | \$6,469.0 | \$6,200.0 |
| State and Tribal Assistance Grants | \$3,167,874.0 | \$2,333,033.0 | \$2,166,600.0 |
| Inspector General | \$21,176.0 | \$18,833.0 | \$18,060.0 |
| | | | |
| Land Preservation and Restoration | \$1,722,255.3 | \$1,805,990.8 | \$1,691,463.0 |
| Environmental Program & Management | \$194,219.0 | \$209,150.0 | \$220,985.0 |
| Science & Technology | \$14,945.0 | \$9,106.0 | \$14,006.0 |
| Building and Facilities | \$5,203.0 | \$5,233.0 | \$4,933.0 |
| State and Tribal Assistance Grants | \$119,337.0 | \$144,350.0 | \$116,350.0 |
| Leaking Underground Storage Tanks | \$73,372.0 | \$72,545.0 | \$73,027.0 |
| Oil Spill Response | \$17,455.0 | \$16,425.0 | \$15,863.0 |
| Inspector General | \$2,061.0 | \$2,506.0 | \$2,372.0 |
| Hazardous Substance Superfund | \$1,295,662.0 | \$1,346,676.0 | \$1,243,927.0 |
| | | | |
| Healthy Communities and Ecosystems | \$1,222,772.7 | \$1,292,007.7 | \$1,336,247.8 |
| Environmental Program & Management | \$586,080.0 | \$641,214.0 | \$677,503.0 * |
| Science & Technology | \$321,192.0 | \$321,794.0 | \$336,730.0 |
| Building and Facilities | \$15,553.0 | \$14,993.0 | \$14,192.0 |

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request |
|---|--------------------------------|-------------------------------|----------------------------|
| State and Tribal Assistance Grants | \$249,715.0 | \$297,867.0 | \$292,300.0 |
| Inspector General | \$5,861.0 | \$7,209.0 | \$7,349.0 |
| Hazardous Substance Superfund | \$44,372.0 | \$8,931.0 | \$8,174.0 |
| Compliance and Environmental Stewardship | \$739,222.5 | \$735,342.5 | \$760,978.2 |
| Environmental Program & Management | \$516,319.0 | \$508,103.0 | \$550,786.0 |
| Science & Technology | \$76,969.0 | \$50,461.0 | \$43,779.0 |
| Building and Facilities | \$7,142.0 | \$6,618.0 | \$6,051.0 |
| State and Tribal Assistance Grants | \$114,026.0 | \$143,800.0 | \$132,800.0 |
| Inspector General | \$3,046.0 | \$3,734.0 | \$3,715.0 |
| Hazardous Substance Superfund | \$21,721.0 | \$22,627.0 | \$23,847.0 |
| Total | \$8,426,731.4 | \$7,789,244.0 | \$7,570,600.0 * |

* The FY 2006 President's Budget includes \$50M to be derived from changes to Toxics and Pesticides fees proposed in subsequent legislation. In FY 2005 the fees were \$30M.

GOAL, APPROPRIATION SUMMARY

Full-time Equivalents (FTE)

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request |
|---|--------------------------------|-------------------------------|----------------------------|
| Clean Air and Global Climate Change | 2,644.3 | 2,760.2 | 2,658.1 |
| Environmental Program & Management | 1,892.0 | 1,961.0 | 1,897.0 |
| Science & Technology | 672.0 | 702.0 | 679.0 |
| Inspector General | 33.0 | 41.0 | 40.0 |
| Hazardous Substance Superfund | 18.0 | 18.0 | 18.0 |
| Envir. Program & Mgmt - Reim | 2.0 | 0.0 | 0.0 |
| Science and Tech. - Reim | 3.0 | 3.0 | 3.0 |
| FEMA - Reim | 3.0 | 0.0 | 0.0 |
| WCF-REIMB | 21.0 | 35.0 | 22.0 |
| Clean and Safe Water | 2,904.0 | 3,088.5 | 2,916.9 |
| Environmental Program & Management | 2,256.0 | 2,448.0 | 2,250.0 |
| Science & Technology | 471.0 | 489.0 | 519.0 |
| Inspector General | 149.0 | 135.0 | 131.0 |
| Envir. Program & Mgmt - Reim | 13.0 | 0.0 | 0.0 |
| WCF-REIMB | 14.0 | 16.0 | 16.0 |

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request |
|---|--------------------------------|-------------------------------|----------------------------|
| Land Preservation and Restoration | 4,646.4 | 4,763.6 | 4,752.2 |
| Environmental Program & Management | 1,177.0 | 1,259.0 | 1,237.0 |
| Science & Technology | 46.0 | 48.0 | 52.0 |
| Leaking Underground Storage Tanks | 74.0 | 79.0 | 77.0 |
| Oil Spill Response | 89.0 | 100.0 | 99.0 |
| Inspector General | 15.0 | 18.0 | 17.0 |
| Hazardous Substance Superfund | 3,132.0 | 3,177.0 | 3,180.0 |
| Envir. Program & Mgmt - Reim | 6.0 | 0.0 | 0.0 |
| Oil Spill Response - Reim | 6.0 | 0.0 | 0.0 |
| FEMA - Reim | 3.0 | 0.0 | 0.0 |
| Superfund Reimbursables | 88.0 | 78.0 | 78.0 |
| WCF-REIMB | 11.0 | 4.0 | 12.0 |
| | | | |
| Healthy Communities and Ecosystems | 3,825.4 | 3,844.8 | 3,834.7 |
| Environmental Program & Management | 2,444.0 | 2,535.0 | 2,521.0* |
| Science & Technology | 1,021.0 | 998.0 | 1,018.0 |
| Inspector General | 41.0 | 52.0 | 53.0 |
| Rereg. & Exped. Proc. Rev Fund | 187.0 | 187.0 | 187.0 |
| Hazardous Substance Superfund | 59.0 | 42.0 | 20.0 |
| Envir. Program & Mgmt - Reim | 16.0 | 0.0 | 0.0 |
| Pesticide Registration Fund | 23.0 | 0.0 | 0.0 |
| WCF-REIMB | 34.0 | 31.0 | 35.0 |
| | | | |
| Compliance and Environmental Stewardship | 3,590.8 | 3,446.9 | 3,469.3 |
| Environmental Program & Management | 3,216.0 | 3,068.0 | 3,143.0 |
| Science & Technology | 213.0 | 222.0 | 170.0 |
| Inspector General | 21.0 | 27.0 | 27.0 |
| Hazardous Substance Superfund | 112.0 | 116.0 | 114.0 |
| Envir. Program & Mgmt - Reim | 12.0 | 0.0 | 0.0 |
| WCF-REIMB | 16.0 | 14.0 | 15.0 |
| | | | |
| Total | 17,610.9 | 17,904.0 | 17,631.0* |

* Agency Authorized FTE levels are being aligned with actual utilization. See overview section.

Clean Air and Global Climate Change

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

STRATEGIC OBJECTIVES:

- Through 2010, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.
- By 2008, 22.6 million more Americans than in 1994 will be experiencing healthier indoor air in homes, schools, and office buildings.
- By 2010, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and the risk to human health from overexposure to ultraviolet (UV) radiation, particularly among susceptible subpopulations, such as children, will be reduced.
- Through 2008, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.
- Through EPA's voluntary climate protection programs, contribute 45 million metric tons of carbon equivalents (MMTCE) annually to the President's 18 percent greenhouse gas intensity improvement goal by 2012. (An additional 75 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for greenhouse gas intensity improvement.)
- Through 2010, provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations
Full-time Equivalents (FTE)
(Dollars in Thousands)

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request | FY 2006 Request v. FY 2005 Pres. Bud. |
|--|------------------------|-----------------------|--------------------|--|
| Clean Air and Global Climate Change | \$932,373.4 | \$1,011,027.3 | \$968,882.7 | (\$42,144.6) |
| Healthier Outdoor Air | \$588,929.9 | \$660,428.2 | \$612,802.7 | (\$47,625.5) |
| Healthier Indoor Air | \$49,526.2 | \$50,257.9 | \$48,451.1 | (\$1,806.8) |
| Protect the Ozone Layer | \$19,542.4 | \$22,760.6 | \$20,573.9 | (\$2,186.7) |
| Radiation | \$33,758.8 | \$35,132.0 | \$38,839.2 | \$3,707.1 |

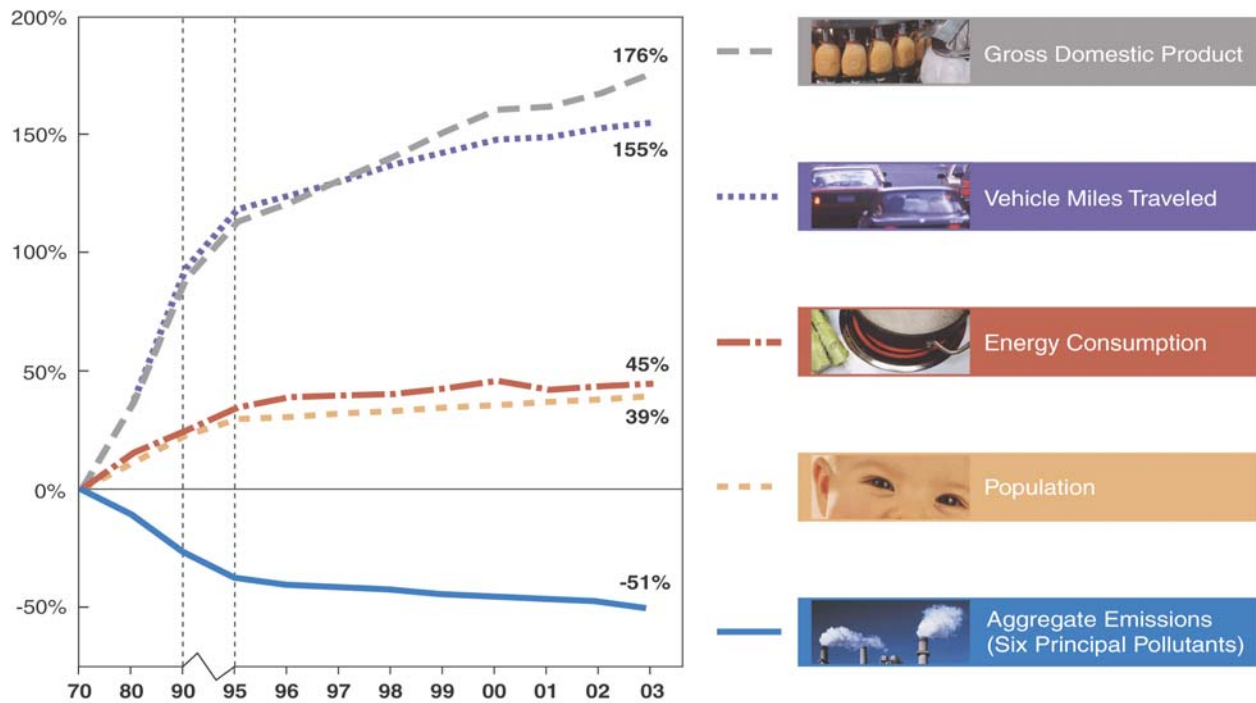
| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request | FY 2006 Request v. FY 2005 Pres. Bud. |
|---------------------------------|---------------------|--------------------|-----------------|---------------------------------------|
| Reduce Greenhouse Gas Intensity | \$105,114.1 | \$111,516.0 | \$114,922.6 | \$3,406.6 |
| Enhance Science and Research | \$135,502.1 | \$130,932.6 | \$133,293.2 | \$2,360.7 |
| Total Workyears | 2,644.3 | 2,760.2 | 2,658.1 | -102.2 |

EPA implements the Clean Air and Global Climate Change goal through national programs designed to provide healthier outdoor and indoor air for all Americans, protect the stratospheric ozone layer, minimize the risks from radiation releases, reduce greenhouse gas intensity, and enhance science and research. In implementing the goal, EPA carries out its responsibilities through programs that include several common elements: setting risk-based priorities; facilitating regulatory reform and market-based approaches; partnering with state, Tribal, and local governments, non-governmental organizations, and industry; promoting energy efficiency; and using sound science.

EPA’s key clean air programs – particulate matter, ozone, acid rain, air toxics, indoor air, radiation and stratospheric ozone

depletion – address some of the highest health and environmental risks faced by the Agency. These programs have achieved results. Every year, state and Federal air pollution programs established under the Clean Air Act prevent tens of thousands of premature mortalities, millions of incidences of chronic and acute illness, tens of thousands of hospitalizations and emergency room visits, and millions of lost work days. Between 1970 and 2003, gross domestic product (GDP) increased 176 percent, vehicle miles traveled increased 155 percent, energy consumption increased 45 percent, and U.S. population grew by 39 percent. During the same time period, total emissions of the six principal air pollutants dropped by 51 percent. The graphic below shows the decrease in emissions versus the percentage growth in GDP, vehicle use, energy consumption, and population since 1970.

Comparison of Growth Areas and Emissions



The benefits of implementing the Clean Air Act exceed costs by a factor of six or seven to one, as noted in OMB's report, *Informing Regulatory Decisions*. Based on EPA's estimates, Clean Air Act costs have been relatively small compared to the dollar value of public health and environmental benefits. For EPA's voluntary climate change programs, every EPA dollar spent returns \$75 in energy savings. To achieve the Clean Air and Global Climate Change goal, we will use the following strategies:

Long term - We will make decisions today that increase the pace of environmental progress and significantly enhance public health for generations to come.

Collaborate - We will achieve our goals through meaningful and productive interaction with others who seek environmental progress and improved public health.

Enhance Economic Growth and Prosperity - Our actions will not compromise our economic competitiveness, and will have benefits that justify their costs.

Strategically Focused and Performance-based - We will link our priorities to EPA's *2003-2008 Strategic Plan: Direction for the Future* and measure our success by our outcomes.

National standards, compliance and enforcement - We will set strong national standards, assist with compliance, and bring the full force of the law consistently and fairly on those who evade.

Markets, incentives and innovation - We will benefit from the power of markets and well-crafted incentives to increase the velocity of progress, stimulate technological innovation and reward performance.

Best science - We will generate, share and rely on the best-available scientific, engineering and economic information to

guide our endeavors.

Historically, environmental progress has been achieved largely by advances in environmental technologies - including such advances as catalytic converters on cars and trucks, sulfur dioxide (SO₂) scrubbers, selective catalytic reduction for nitrogen oxides (NO_x) removal, and reformulated gasoline. EPA can foster demand for new and innovative, cost-effective technologies by designing and promoting market-based strategies, such as the President's Clear Skies Initiative cap-and-trade program, that create markets and provide incentives to develop the most efficient, best-performing technologies. Technological innovation will continue to be the foundation that will enable us to reach aggressive goals over the next 15 years that will match or exceed the progress we have made in the past.

Hundreds of new products are under development, in testing, or coming to market that will further help meet air quality goals. Fuel cells, hybrid vehicles, renewable fuels, and zero-emission power plants are only a few examples of the new and emerging technologies that will help us achieve cleaner air for all Americans over the next 15 years.

EPA's strategy for achieving clean outdoor air includes the President's Clear Skies Initiative - a comprehensive, multi-pollutant approach that combines national and local measures, with implementation responsibilities carried out by the most appropriate and effective level of government. Air pollution sources with broad regional, national or global impact - emissions from power plants and other large sources, pollution from motor vehicles and fuels, and stratospheric ozone depletion - are often most effectively handled at the Federal level. A national approach allows for the use of traditional, regulatory tools where appropriate, and enables EPA to implement innovative, market-based

techniques such as emissions trading, banking, and averaging, and other cost-effective national programs. These Federal programs help states and Tribes both meet National Ambient Air Quality Standards (NAAQS) and reduce public exposure to harmful levels of air toxics. States, Tribes, and local agencies can best address the regional and local problems that remain after Federal measures have been fully applied. Many of these approaches employ innovative techniques, such as early action compacts, diesel retrofits and community-based approaches to toxics that are well-suited to the local nature of many air-related problems. EPA works closely with public- and private-sector partners and stakeholders to develop the analytical tools – such as monitoring, modeling, and emission factors and inventories – that allow states, Tribes, and localities to address these more localized problems.

To improve air quality and address the highest health and environmental risks, EPA will proceed with Federal stationary and mobile source programs aimed at achieving large, nationwide, cost-effective reductions in emissions of particulate matter (PM) and its contributors such as SO₂, NO_x, and elemental and organic carbon; ozone-forming NO_x; and volatile organic compounds (VOCs). In FY 2006, we will continue our progress towards healthier air by helping states, Tribes, and localities meet ozone and particulate matter air quality standards by their attainment dates under the Clean Air Act via the President's Clear Skies Initiative or, should legislation not be enacted, through the Clean Air Interstate Rule. EPA is coordinating its efforts to implement these standards with the Regional Haze rule to maximize the ability of the states, Tribes and regulated community to respond to these requirements in an integrated fashion. Continued research into air quality models and other tools will enable states and local areas to attain these standards as cost-effectively as possible.

Joint efforts with Canada and Mexico will address transboundary air pollution in the U.S.-Canada and U.S.-Mexico border regions. In their efforts to attain the standards, states and local areas will be able to take advantage of market-based approaches.

While significant progress has been made under the existing Clean Air Act, further benefits could be achieved faster, with more certainty, and at less cost to consumers through Clear Skies – an Administration proposal that expands the current Acid Rain program to dramatically reduce nationwide power plant emissions of SO₂ and NO_x, as well as, for the first time ever, reduce mercury emissions from power plants. Clear Skies would reduce emissions of these three pollutants by nearly 70 percent while encouraging innovation and the deployment of cleaner, more cost effective technologies. The Clear Skies legislation was submitted to Congress in 2002 and the Administration continues to promote its enactment.

Although Clear Skies is the more comprehensive and cost effective approach and therefore the strongly preferred solution, the Administration is pursuing a regulatory path that would achieve many of the same benefits should legislation not be enacted. EPA has proposed the Clean Air Interstate Rule (CAIR) which regulates the transport of power plant emissions of SO₂ and NO_x across state lines via a market-based approach similar to Clear Skies. CAIR is projected to reduce pollution from electrical power generation sources by close to 70% when fully implemented.

Both Clear Skies and CAIR call for utilities to utilize a cap and trade program modeled after EPA's successful Acid Rain SO₂ Allowance Trading Program. The Acid Rain Program provides incentives for operators of power plants to find the best, fastest, and most efficient ways to make the required reductions in emissions as well as to do make reductions earlier than required.

One of EPA's highest priorities is meeting the fine particulate matter and ozone standards. This will be achieved through implementation of Clear Skies or CAIR; the on-road and non-road vehicle and fuels standards; and state, tribal, and local clean air programs. When combined with emission reductions from the recently completed Clean Air Non-road Diesel Rule and other national control programs, the reductions resulting from Clear Skies or the final CAIR will allow most areas of the country to meet the ozone and fine particulate matter standards without having to impose additional local controls. States rely on EPA for modeling, emissions factors and other tools as they develop their clean air plans for particulate matter and ozone.

Clean fuels and clean technologies are an integral part of reducing emissions from mobile sources. EPA promotes the use of clean fuels – especially hydrogen, alternative fuels, and near-zero sulfur fuels – as well as cleaner technologies. Cost-effective national standards, public/private partnerships, market incentives, and consumer education campaigns are some of the tools that will be used to accomplish this. Opportunities exist to obtain significant reductions from new non-road and existing diesel engines. The Agency will continue to work with engine manufacturers and fuel producers to assure smooth implementation of the 2007 Clean Diesel Program for trucks and buses. The Clean School Bus USA program has also led the Agency to explore other avenues for retrofitting or replacing existing diesel engines.

In FY 2006, EPA and a coalition of clean diesel interests will work together to expand the retrofitting of diesel engines into new sectors by adopting a risk-based strategy, targeting key places and working with specific use sectors to identify opportunities to accelerate the adoption of cleaner

technologies and fuels. EPA will partner with a diverse group of stakeholders including industry, state and local governments, public health officials and environmental organizations to develop strategies for four sectors: construction, ports, freight, and school buses. EPA's Clean Diesel Initiative will achieve immediate results by working with this coalition to leverage Federal funds with private sector and state and local support. The Initiative will complement regional approaches, including the West Coast Diesel Emissions Reduction Collaborative, the Midwest Clean Diesel Corridors Initiative, and the Boston Breathes Better Initiative.

The Clean Air Act includes a variety of provisions that address air toxics from all categories of sources. The 188 hazardous air pollutants (HAPs) listed in the Act are emitted from mobile sources, major stationary sources and area stationary sources. EPA implements a two-phase program to reduce emissions of air toxics from major stationary sources. In the first phase, EPA set Maximum Achievable Control Technology (MACT) standards. In the second phase, which is risk-based, EPA examines each MACT standard eight years after promulgation to determine if the health risk remaining from each industrial category from is considered safe. Where appropriate, EPA will develop more stringent residual risk standards to reduce cancer and non-cancer health risks.

The Indoor Air Program addresses indoor air quality problems by characterizing the risks of indoor air pollutants to human health, developing techniques for reducing those risks, and educating the public about what they can do to reduce their risks from indoor air. Through voluntary partnerships with non-governmental and professional organizations, EPA educates and encourages individuals, schools, industry, the health care community, and others to take action to reduce health risks in indoor environments.

EPA also uses technology-transfer to improve the design, operation, and maintenance of buildings – including schools, homes, and workplaces – to promote healthier indoor air.

EPA's Climate Protection Programs continues to contribute to the greenhouse gas reductions required to meet the President's 18 percent greenhouse gas intensity reduction goal by 2012. For more than a decade, businesses and organization have partnered with EPA through voluntary climate protection programs to pursue common sense approaches. Energy Star and other voluntary programs have increased the use of energy-efficient products and practices and reduced emissions of carbon dioxide, as well as methane and other greenhouse gases with very high global warming potentials. As these partnership programs spur investment in advanced energy technologies and the purchase of energy-efficient products, they create emissions reduction benefits that accrue over the lifetime of the investment or product.

Offering recognition for innovative solutions to commuting challenges faced by employers and employees, Best Workplaces for CommutersSM is a public-private sector voluntary program advocating employee commuter benefits. Established by the EPA and the U.S. Department of Transportation (DOT), this program publicly recognizes employers whose commuter benefits reach the National Standard of Excellence. Providing commuter benefits helps employers address limited or expensive parking, reduce traffic congestion, improve employee recruiting and retention, and minimize the environmental impacts associated with drive-alone commuting.

EPA continues to expand the ENERGY STAR program for energy efficiency in the residential, commercial, and industrial sectors. The Buildings Sector represents one

of EPA's largest areas of potential, and at the same time is one of its most successful. The Industrial Sector goals include the Agency's work with state and local governments, and state and local governments' work with industry to prevent greenhouse gas emissions. EPA will continue to build on the success of the voluntary programs in the industrial sector, focusing on reducing CO₂ emissions and continuing the highly successful initiatives to reduce methane emissions and emissions of the high global-warming-potential gases.

The SmartWay Transport Partnership is a national voluntary program developed by EPA and freight industry representatives to reduce greenhouse gases and air pollution and promotes cleaner, more efficient ground freight transportation. By 2012, the Partnership aims to reduce as much as 33 to 66 million metric tons of carbon dioxide (CO₂) emissions and up to 200,000 tons of nitrogen oxides (NO_x) emissions annually. Partners achieve goals by adopting improved practices, processes and energy saving technologies that are cost effective, cleaner, more efficient, and capable of reducing greenhouse gas emissions.

Under the Clean Automotive Technology (CAT) program, EPA works to: achieve ultra-low pollution emissions; increase fuel efficiency; and reduce greenhouse gases. By promoting the development of cost-effective technologies, the CAT program also encourages manufacturers to produce cleaner and more fuel-efficient vehicles. The program encourages the commercialization of promising technologies by actively pursuing the transfer of EPA's technologies into the private sector. EPA partners with industry to maximize the viability of targeted technologies for commercial production through cooperative research and development agreements.

An FY 2006 Climate Change Program

initiative is the Methane to Markets Partnership - a U.S. led international initiative that promotes cost-effective, near-term methane recovery and use as a clean energy source. The Partnership has the potential to deliver by 2015 annual reductions in methane emissions of up to 50 MMTCE or recovery of 500 billion cubic feet (Bcf) of natural gas. The Methane to Markets Partnership builds on the success of EPA's domestic methane voluntary programs by creating an international forum to promote methane recovery and use projects in developing countries.

The benefits of increasing methane recovery and use include reduced global methane emissions, enhanced economic growth, increased energy security, and improved local air quality. The Partnership initially targets three major methane sources: landfills, underground coal mines, and natural gas and oil systems. The Partnership will achieve its goals through collaboration among developed countries, developing countries, and countries with economies in transition - together with strong participation from the private sector, development banks, and other governmental and non-governmental organizations.

EPA's Domestic Stratospheric Ozone Protection Program will implement the provisions of the Clean Air Act and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), which will lead to the reduction and control of ozone-depleting substances (ODSs) in the U.S. and lower health risks to the American public due to exposure to UV radiation. EPA will focus its efforts on finding alternatives to methyl bromide, an ozone-depleting substance.

In FY 2006, EPA will continue upgrading the national radiation monitoring system. The response time and data dissemination of the upgraded monitoring system would be

significantly better than that of the existing monitoring system, and the population coverage of the upgraded system would be significantly better than the population coverage of the existing fixed monitoring system as well as allowing for greater density of sampling locations near and downwind from incidents and maintenance and calibration of deployable monitoring stations. Additionally, EPA will equip up to two radiation teams with state-of-the-art radiation equipment and technical tools to deploy to two simultaneous incidents in any part of the country. Each team will be fully capable of providing timely and accurate information to support the Agency's decontamination/disposal decision-making efforts. EPA will also augment existing applied science radiological labs to meet emergency homeland security needs by developing radiochemistry methods, refining analytical protocols, and conducting training. EPA will also enhance lab response capability to ensure a minimal level of surge capacity for radiological terrorism incidents.

Research

EPA's air research provides the scientific foundation the Agency needs to fulfill responsibilities under the Clean Air Act: to make the air safe to breathe and protect human health and the environment. This research focuses on the NAAQS pollutants, as well as the HAPs identified in the Act.

In FY 2006, NAAQS research will continue to strengthen the scientific basis for the periodic review and implementation of air quality standards. This research is concentrated on PM, and includes research on the other NAAQS pollutants on an as needed basis (for more information on EPA's programs to reduce NAAQS pollutants, visit: <http://www.epa.gov/ord/htm/air.htm>). PM research is aligned with the ten priority

research topics for PM identified by the National Research Council (NRC). The NRC has conducted four reviews of EPA's PM research since 1998 to ensure it is relevant to the highest priority research needs and to monitor research performance.

hazard and exposure methods, data, and models to enable the Agency to reduce uncertainty in risk assessments, and the production of tools that enable national, regional, state, or local officials to identify and implement cost-effective approaches to reduce risks from sources of air toxics.

EPA manages its air-related research programs according to the Administration's Investment Criteria for Research and Development. The Agency's detailed, externally-reviewed multi-year plans for its air toxics and NAAQS-related research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources. As part of the periodic multi-year plan revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the particulate matter research program in the second quarter of FY 2005. The NAAQS program will be reassessed by OMB's Program Assessment Rating Tool (PART) in the spring of 2005.

Air toxics research will provide information on effects, exposure, and source characterization, as well as other data to quantify existing emissions and to identify key pollutants and strategies for cost-effective risk management. In FY 2006, research will focus on providing health

In FY 2006, a portion of EPA's air research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Air and Radiation to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority air research needs.

Clean and Safe Water

Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

STRATEGIC OBJECTIVES:

- Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.
- Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.
- Provide and apply a sound scientific foundation to EPA's goal of clean and safe water by conducting leading-edge research and developing a better understanding and characterization of the environmental outcomes under Goal 2.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations
Full-time Equivalents (FTE)
(Dollars in Thousands)

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request | FY 2006 Request v. FY 2005 Pres. Bud. |
|------------------------------|--------------------------------|-------------------------------|----------------------------|--|
| Clean and Safe Water | \$3,810,107.5 | \$2,944,875.7 | \$2,813,028.3 | (\$131,847.4) |
| Protect Human Health | \$1,293,345.7 | \$1,169,287.4 | \$1,195,366.2 | \$26,078.8 |
| Protect Water Quality | \$2,382,542.5 | \$1,653,907.9 | \$1,483,516.9 | (\$170,391.0) |
| Enhance Science and Research | \$134,219.2 | \$121,680.5 | \$134,145.2 | \$12,464.8 |
| Total Workyears | 2,904.0 | 3,088.5 | 2,916.9 | -171.6 |

Over the 30 years since enactment of the Clean Water and Safe Drinking Water Acts (CWA and SDWA), government, citizens, and the private sector have worked together to make dramatic progress in improving the quality of surface waters and drinking water.

Thirty years ago, much of the Nation's tap water had either very limited treatment (usually disinfection) or no treatment at all. About two-thirds of the surface waters assessed by states were not attaining basic water quality goals and were considered

polluted.¹ Some of the Nation's waters were open sewers posing health risks and many water bodies were so polluted that traditional uses, such as swimming, fishing, and recreation, were impossible. Today, drinking water systems monitor and treat water to assure compliance with drinking water standards covering a wide range of contaminants. In addition, we now protect

¹ United States Environmental Protection Agency Office of Water. 1998. *Clean Water Action Plan: Restoring and Protecting America's Water*. Washington, DC: Government Printing Office.

sources of drinking water through activities such as regulating underground injection of wastes. The number of polluted waters has been reduced and many clean waters are even healthier. A massive investment of Federal, state, and local funds resulted in a new generation of wastewater treatment facilities able to provide “secondary” treatment or better. EPA has issued national discharge regulations for over 50 industrial categories. In addition, sustained efforts to implement “best management practices” have helped reduce runoff of pollutants from diffuse or “nonpoint” sources.

Cleaner, safer water has renewed recreational, ecological, and economic interests in communities across the nation. The recreation, tourism, and travel industry is one of the largest employers in the nation, and a significant portion of recreational spending comes from swimming, boating, sport fishing, and hunting.² Each year, more than 180 million people visit the shore for recreation.³ In 2001, sportspersons spent a total of \$70 billion— \$35.6 billion on fishing, \$20.6 billion on hunting, and \$13.8 million on items used for both hunting and fishing. Wildlife watchers spent an additional \$38.4 billion on their activities around the home and on trips away from home.⁴ The commercial fishing industry, which also requires clean water and healthy wetlands, contributed \$28.6 billion to the economy in 2001.⁵ The Cuyahoga River, which once caught fire, is now busy with boats and harbor businesses that generate substantial revenue for the City of Cleveland. The Willamette River in Oregon has been

restored to provide swimming, fishing, and water sports. Even Lake Erie, once infamous for its dead fish, now supports a \$600 million per year fishing industry.⁶

Although we have made much progress and this progress has had important economic as well as human health and environmental benefits, there is still work to be done to realize the vision of clean rivers, lakes, streams and coastal areas and safe water to drink. In Fiscal Year 2006, EPA will work with States and Tribes to continue accomplishing measurable improvements in the safety of the nation’s drinking water and in the condition of rivers, lakes and coastal waters. This Overview summarizes key environmental and public health goals and describes the general strategies EPA proposes to implement to accomplish these goals. With the help of States, Tribes and other partners, EPA expects to make significant progress toward protecting human health and improving water quality by 2008, including –

- **Water Safe to Drink:** increase the rate of compliance with drinking water standards from 93% to 95%;
- **Fish and Shellfish Safe to Eat:** reduce the percentage of the water miles/acres identified by States or Tribes as having fish consumption advisories in 2002 where increased consumption of safe fish is allowed, (485,205 river miles, 11,277,276 lake acres) while increasing the percentage of the shellfish growing acres monitored by states that are approved or conditionally approved for use from 77% to 91%;
- **Water Safe for Swimming:** increase the percentage of the stream miles and lake acres identified by States in 2000 as

² Travel Industry Association of America. *Tourism for America, 11th Edition*. Washington, DC: Travel Industry of America.

³ Pew Oceans Commission. 2002. *America’s Living Oceans Charting a Course for Sea Change*. Arlington, VA: Pew Oceans Commission.

⁴ U.S. Fish and Wildlife Service. 2002. *2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation*. Washington, DC: Government Printing Office.

⁵ National Marine Fisheries Service. 2002. *Fisheries of the U.S. 2001*. Washington, DC: Government Printing Office.

⁶ United States Environmental Protection Agency Office of Water. 1998. *Clean Water Action Plan: Restoring and Protecting America’s Water*. Washington, DC: Government Printing Office.

having water quality unsafe for swimming where water quality that is restored to allow swimming. (90,000 stream miles, 2.6 million lake acres);

- **Cleaner Water and Healthy Watersheds:** restore polluted waters so that, of the 2,262 major watersheds across the Nation, at least 600 have few remaining problems (i.e., at least 80% of assessed waters meet State water quality standards (WQS)) and show improvement in 200 watersheds; and
- **Healthy Coastal Waters:** show steady improvement in seven specific indicators of the health of each of the four major coastal ecosystems around the country.

The clean and safe water goals are closely related to goals established in Goal 4 of the Agency *Strategic Plan* related to improvements in wetlands, estuaries, targeted geographic programs such as the waters of the Mexico Border region, the Great Lakes, the Chesapeake Bay, and the Gulf of Mexico. The key strategies that EPA plans to implement in FY 2006 to make progress toward the public health and environmental goals identified in the Strategic Plan are briefly described below.

Water Safe to Drink

For almost 30 years, protecting the Nation's public health through safe drinking water has been the shared responsibility of EPA, the States, and over 53,000 community water systems (CWSs)⁷ nationwide that supply drinking water to more than 260 million Americans (approximately 90% of

the U.S. population). Within this time span, safe drinking water standards have been established and are being implemented for 91 microbial, chemical, and radiological contaminants. Forty-nine States have adopted primary authority for enforcing their drinking water programs. Additionally, CWS operators are better informed and trained to both treat contaminants and prevent them from entering the source of their drinking water supplies.

During 2006, EPA, the States, and CWSs will build on these successes while working toward the 2008 goal of assuring that 95 percent of the population served by CWSs receives drinking water that meets all applicable standards. Collectively, these core areas and other interrelated elements of the national safe drinking water program form a balanced, integrated framework that comprises the multiple barrier approach to protecting public health from unsafe drinking water. At the national level, implementation of this approach is expected to result in significant progress toward the public health goals described above. EPA has identified key activities within five core program areas that are critical to ensuring safe drinking water. The core program areas are described below:

Drinking Water Standards

During FY 2006, EPA will continue to assess the need for new or revised drinking water standards based on available data on health effects, occurrence, risks of exposure, analytical (detection) methods, as well as information on technologies to prevent, detect, or remove specific contaminants. Specifically, EPA will:

- Determine whether to regulate at least five unregulated contaminants on the second contaminant candidate list (CCL) and, through the Six-Year Review of existing regulations, whether a revision

⁷ Although the Safe Drinking Water Act applies to 159,796 public water systems nationwide (as of January 2004), which include schools, hospitals, factories, campgrounds, motels, gas stations, etc. that have their own water system, this implementation plan focuses only on CWSs. A CWS is a public water system that provides water to the same population year-round. As of January 2004, there were 52,838 CWSs.

- to an existing standard is warranted;
- Continue analysis to prepare the Agency's third CCL;
- Continue the comprehensive Lead and Copper Rule Review that began in 2004;
- Develop revisions to the Total Coliform Rule (TCR); and
- Consider additional protections of drinking water distribution systems.

Drinking Water Implementation

During FY 2006, EPA will support State efforts to meet existing and new drinking water standards including the Cryptosporidium⁸, Disinfection⁹ (Stage 2 Disinfectants and Disinfection Byproducts Rule), and Ground Water Rules. EPA will be responsible for directly implementing the early monitoring requirements under these rules. In addition, initial monitoring requirements under the revised arsenic rule and revised radionuclides rule will be underway. EPA and the states will use the following tools to encourage compliance:

- **Public Water System Supervision (PWSS) Program Grants:** These grants provide assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health
- **Sanitary Surveys:** Sanitary surveys are on-site reviews of the water sources, facilities, equipment, operation, and maintenance of public water systems. All States are to be in compliance with requirements to conduct sanitary surveys at CWSs once every three years starting in 2004.
- **Data Access, Quality, and Reliability:** EPA will complete the modernization of the Safe Drinking Water Information System (SDWIS), which serves as the primary source of national information

on compliance with all health-based, regulatory requirements of SDWA.

Promotion of Sustainable Management of Drinking Water Infrastructure

The Drinking Water State Revolving Loan Fund (DWSRF), established under the Safe Drinking Water Act, offers low interest loans to help public water systems across the nation make improvements and upgrades to their water infrastructure, or other activities that build system capacity. In FY 2006, the DWSRF program will provide an estimated 600 more loans. EPA will also work with States to increase the percentage of loan agreements made each year that return a system to compliance, estimated to be 30% of loan agreements in 2002.

Protection of Sources of Drinking Water

In FY 2006, EPA will work with States and water systems to improve protection of sources of drinking water in two key areas.

- **Voluntary Source Water Protection Strategies:** EPA will promote the concepts of a multiple barriers approach to drinking water program management and will work with States to track, to the extent feasible, the development and implementation of source water protection strategies. EPA has set a goal of increasing the number of source water areas (both surface and ground water) for community water systems that have minimized risk to public health from an estimated baseline of 5% of all areas in 2002 to 20% in FY 2006.
- **Underground Injection Control:** EPA works with States to regulate injection of hazardous substances and other waste to prevent contamination of underground sources of drinking water. In FY 2006, EPA will continue to focus on shallow wells (Class V) in source water areas. EPA and the States will work to assure

⁸ Long Term 2 Enhanced Surface Water Treatment

⁹ Stage 2 Disinfectants and Disinfection Byproducts Rule

that all identified Class V motor vehicle waste disposal wells are closed by 2008. EPA and States will also work to assure that 100 percent of Class I, II, III and V wells that are identified in violation are addressed.

Assurance that Critical Water Infrastructure Is Secure

In FY 2006, EPA will continue its lead Federal Agency responsibility in supporting States and water utilities to secure their water infrastructure from terrorist threats and other intentional harm. In addition, due to its new responsibilities under Homeland Security Presidential Directives 7 and 9, EPA will support the water sector in implementing protective measures and in launching a new and innovative drinking water surveillance and monitoring program. The Agency will also provide critical tools, training, and exercises that will help utilities detect, prevent, and respond to threats.

Fish and Shellfish Safe to Eat

Across the U.S., States and Tribes have issued fish consumption advisories for a range of persistent, bioaccumulative contaminants covering more than 840,000 river miles and 14 million lake acres as of 2003.¹⁰ The EPA *Strategic Plan* calls for improving the quality of water and sediments to allow increased consumption of fish and shellfish. EPA's national approach to meeting safe fish and shellfish goals is described below.

Safe Fish

Most of the current fish consumption advisories issued by states are for mercury, PCBs, and dioxin. EPA is emphasizing strategic partnerships within the Agency to

address these pollutants. EPA's water program is also addressing remaining controllable sources of fish exposure to these chemicals. The Agency is:

- developing mercury fish tissue criteria implementation guidance to ensure new criteria are incorporated into WQS and implemented in National Pollutant Discharge Elimination System (NPDES) permits.
- working with states to improve their advisory programs with particular emphasis on periodic re-sampling of previously tested waters that are under advisory
- working to identify emerging contaminants to ensure that routes of fish exposure to new, emerging contaminants are addressed early, before they become a new reason for waters coming under advisory

Safe Shellfish

Success in achieving the shellfish goals relies on implementation of CWA programs that are focused on sources causing shellfish acres to be closed. Important new technologies include pathogen source tracking, new indicators of pathogen contamination and predictive correlations between environmental stressors and their effects. Once critical areas and sources are identified, core program authorities, including expanded monitoring, development of TMDLs, and revision of discharge permit limits can be applied to improve conditions.

In addition, a wide range of clean water programs that apply throughout the country will generally reduce pathogen levels in key waters. For example, work to control Combined Sewer Overflows (CSOs), to reduce discharges from Concentrated Animal Feeding Operations, to reduce storm water runoff, and to reduce nonpoint pollution will contribute to restoration of shellfish uses.

¹⁰ United States Environmental Protection Agency Office of Water. Fact Sheet: National Listing of Fish Advisories. EPA-823-F-04-016. August 2004. Available on the Internet at <http://www.epa.gov/waterscience/fish/advisories/factsheet.pdf>

Finally, success in achieving the shellfish goal also depends on the efforts of other agencies. For example, EPA is working with the National Oceanic and Atmospheric Administration and the Food and Drug Administration to improve data and data management on contaminated and closed shellfishing areas.

Water Safe for Swimming

Recreational waters, especially beaches in coastal areas and the Great Lakes, provide recreational opportunities for millions of Americans. Swimming in some recreational waters, however, can pose a risk of illness as a result of exposure to microbial pathogens. In November 2004, EPA established more protective health-based WQSs for bacteria for those States and Territories bordering Great Lakes or ocean waters that had not yet adopted standards in accordance with the Beaches Environmental Assessment and Coastal Health Act of 2000, an important step to further protect the quality of the nation's coastal recreation waters.¹¹ For FY 2006, EPA's national strategy for improving the safety of recreational waters will include these key elements:

Improve Beach Monitoring and Public Notification

Another important element of the strategy for improving the safety of recreational waters is improving monitoring of public beaches and notifying the public of unsafe conditions. EPA is working with States to implement the Beaches Environmental Assessment and Coastal Health Act and requests grant funding of \$10 million to States to carry out this work. EPA expects that all Tier 1 public beaches will be monitored and managed under the BEACH

Act in FY 2006 and that states and localities will be taking actions where possible and appropriate to address sources of unsafe conditions that result in the closure of beaches.

Identify Unsafe Recreational Waters and Begin Restoration

A key component of the strategy to restore waters unsafe for swimming is to identify the specific waters that are unsafe and develop plans to accomplish the needed restoration. An important part of this work is to maintain strong progress toward development of Total Maximum Daily Loads (TMDLs) based on the schedules established by States in conjunction with EPA. In a related effort, the Agency will better focus compliance assistance and, where necessary, enforcement resources on unsafe recreational waters. In addition, working with communities that have frequent wet weather discharges (which are a major source of pathogens) to ensure progress to reduce the frequency of these discharges is one of the Agency's national enforcement priorities for FY 2005 through 2007.

Reduce Pathogen Levels in Recreational Waters Generally

In addition to focusing on waters that are unsafe for swimming today, EPA, States and Tribes will work in FY 2006 to reduce the overall level of pathogens discharged to recreational waters using three key approaches:

- reduce pollution from CSOs;
- address major sources discharging pathogens under the permit program; and
- improve management of septic systems.

¹¹ United States Environmental Protection Agency. Federal Register; November 16, 2004; Volume 69, Number 220; pages 67217 – 67243. Water Quality Standards for Coastal and Great Lakes Recreation Waters. Available on the Internet at <http://www.epa.gov/fedrgstr/EPA-WATER/2004/November/Day-16/w25303.htm>

Restore and Improve Water Quality on a Watershed Basis

A significant investment of the National Water Program resources is under the CWA, which directly support efforts to restore and improve the quality of rivers, lakes, and streams. In FY 2006, EPA will work with States to make continued progress toward the clean water goals identified in the Strategic Plan by using a two-part strategy:

- implement core clean water programs, including innovations that apply programs on a watershed basis; and
- accelerate efforts to improve water quality on a watershed basis.

Implement Core Clean Water Programs:

To protect and improve water quality on a watershed basis in FY 2006, EPA, in partnership with States and Tribes, needs to continue to focus the work on integrating the six key program areas that form the foundation of the water program. Core water program work includes:

- **Strengthen Water Quality Standards:** The top priority for the criteria and standards program in FY 2006 is the continued implementation of the *Water Quality Standards and Criteria Strategy*, developed in cooperation with States, Tribes, and the public in 2003. The *Standards Strategy* prioritizes key strategic actions EPA and the states need to complete in order to strengthen the WQS program to guide assessment and restoration efforts. This Strategy calls for EPA to continue work in developing scientific "criteria documents" for key water pollutants, including implementation protocols and methods. In addition, the *Strategy* identifies key efforts to strengthen the program, including developing nutrient criteria, adopting biological criteria, approving state WQS in a more timely manner, and providing technical and scientific

support to the states and Tribes in conducting Use Attainability Analyses and developing site-specific criteria. Finally, EPA will work with States and Tribes to ensure the effective operation and administration of the standards program.

- **Improve Water Quality Monitoring:** Scientifically defensible water quality data and information is essential for cleaning up and protecting the Nation's waters. Federal and state water quality monitoring and assessment programs, the underpinnings of all aspects of the watershed approach, need strengthening. Information about the condition of waterbodies is critical to sound water quality protection decisions. A top priority for FY 2006 is to continue to support States in developing monitoring programs consistent with national monitoring guidance published in 2003, including State participation in efforts to develop statistically valid monitoring networks and State support of the national STORET water quality database.
- **Develop Total Maximum Daily Loads (TMDLs) and Related Plans:** Development of TMDLs for an impaired waterbody is a critical tool for meeting water restoration goals. In FY 2006, EPA will compare States' progress in developing TMDLs against the approved schedules. The purpose is to determine whether states will achieve the goal of being 100 percent on pace each year to meet State schedules or straight-line rates that ensure that the national policy of TMDL completion within 13 years of listing is met.
- **Control Nonpoint Source Pollution on a Watershed Basis:** Polluted runoff from nonpoint sources is the largest single cause of water pollution. In FY 2006, EPA will focus grants to States

under Section 319 of the CWA to expand efforts to manage nonpoint pollution on a watershed basis through the development and implementation of watershed plans. Special emphasis will be placed on restoring impaired waters on a watershed basis.

- **Strengthen NPDES Permit Program:** The NPDES program requires point sources discharging to water bodies to have permits. In FY 2006, EPA will work with States to use the “Permitting for Environmental Results Strategy” to address concerns about the workload for issuing permits and the health of State NPDES programs. The Strategy focuses limited resources on the most critical environmental problems and addresses program efficiency and integrity, including activities to streamline permit issuance and assessments of State programs and permit quality.
- **Support Sustainable Wastewater Infrastructure:** The Clean Water State Revolving Funds (CWSRFs) provide low-interest loans to help finance wastewater treatment facilities and other water quality projects. Recognizing the substantial remaining need for wastewater infrastructure, EPA will continue to provide significant annual capitalization to CWSRFs in FY 2006. Another important approach to closing the gap between the need for clean water projects and available funding is to use sustainable management systems to prolong the lives of existing systems. EPA will work to encourage rate structures that lead to full cost pricing and other conservation measures.

Accelerate Watershed Protection

Strong execution of core CWA programs alone is not sufficient to maintain and accelerate progress toward cleaner water and accomplish the water quality improvements called for in the *Strategic*

Plan. About a decade ago, EPA embraced the watershed approach, focusing on multi-stakeholder and multi-program efforts within hydrologically defined boundaries, as a better way to address water quality problems. In FY 2006, EPA will accelerate watershed protection by working in three key areas:

- **Core Programs Organized by Watershed:** In addition to development of watershed based plans, discussed below, core programs can be implemented on a watershed basis. Some examples in practice as a result of innovations developed by State, EPA Regions, and others are development of TMDLs and NPDES permits on a watershed basis and implementing water quality “trading” programs within a watershed.
- **Local Watershed Protection Efforts:** EPA is developing national tools, training, and technical assistance that will help community partnerships to be more effective at improving watershed health. For FY 2006, EPA will expand support for protection of key watersheds by building on the success of the Watershed Initiative (now called the *Targeted Watershed Grants Program* – see Goal 4).
- **Apply an Adaptive Management Framework:** The best way to achieve progress in improving and protecting waters and watersheds is by applying an adaptive management approach to better understand the problems, set challenging but realistic goals, and address opportunities associated with developing programs and building partnerships at the watershed level. In FY 2006, EPA will continue to work with States and Tribes to apply an adaptive management framework to identify the specific mix of watershed tools that best suit local needs and conditions. Each State and EPA

Region will work to define the extent to which implementation of watershed approaches should be accelerated over the coming years in order to meet the watershed/waterbody restoration and improvement goals for 2008 in the EPA *Strategic Plan*.

Protect Coastal and Ocean Waters

Coastal waters are among the most productive ecosystems on Earth, but they are also among the most threatened ecosystems, largely as a result of rapidly increasing growth and development. About half of the U.S. population now lives in coastal areas and coastal counties are growing three times faster than counties elsewhere in the Nation. The work described here will be closely coordinated with the implementation of the National Estuary Program (described in Goal 4). For FY 2006, EPA's national strategy for improving the condition of coastal and ocean waters will include the following key elements:

Reduce Vessel Discharges

EPA will also focus on enhancing regulation of discharges of pollution from vessels. Key work for FY 2006 includes developing standards for cruise ships operating in Alaskan waters; cooperating with the Department of Defense to develop discharge standards for certain armed forces vessels; and assessing the effectiveness of current regulations for marine sanitation devices.

Manage Dredged Material

Several hundred million cubic yards of sediment are dredged from waterways, ports, and harbors every year to maintain the Nation's navigation system. All of this sediment must be disposed of safely. EPA and the U.S. Army Corps of Engineers (COE) share responsibility for regulating how and where the disposal of sediment occurs. In FY 2006, EPA and COE will continue to focus resources on improving

how disposal of dredged material is managed, including evaluating disposal sites, designating and monitoring the sites. EPA will also review and concur on the disposal permits issued by COE.

Manage Invasive Species

One of the greatest threats to U.S. waters and ecosystems is the uncontrolled spread of invasive species. Invasive species commonly enter U.S. waters through the discharge of ballast water from ships. In FY 2006, EPA will assist the U.S. Coast Guard in its efforts to develop ballast water exchange requirements and discharge standards and is addressing this issue at the international level. In addition, EPA will work to develop improved measures for monitoring the rate of increase of invasive species.

Address International Activities

Internationally, our objective is to protect the environmental quality of U.S. coastal and ocean waters. U.S. waters are subject to international sources of pollution and EPA's international efforts in this area are focused on the development and implementation of international standards necessary to address transboundary sources of pollution, pollution affecting shared ecosystems, and the introduction of non-indigenous species introduced through maritime shipping. To reach these ends we are seeking to reduce the successful introduction of invasive species to U.S. waters through the negotiation of effective international standards addressing ballast water discharges, harmful anti-foulants, and air emissions from ships. In addition, we are isolating high-level radioactive wastes in Northwest Russia that threaten the health of shared natural resources in the Arctic ecosystem. Achievement of the objective and strategic targets will enhance U.S. water quality, human health, and help stabilize aquatic ecosystems in North America.

Research

EPA's drinking water and water quality research programs conduct leading edge, problem-driven research to provide a sound scientific foundation for Federal regulatory decision-making. These efforts will result in strengthened public health and aquatic ecosystem protection by providing data methods, models, assessments, and technologies for EPA program and regional offices, as well as state and local authorities.

The drinking water research program will focus on filling key data gaps and developing analytical detection methods for measuring the occurrence of chemical and microbial contaminants on the Contaminant Candidate List (CCL) and developing and evaluating cost-effective treatment technologies for removing pathogens from water supplies while minimizing microbial/disinfection by-product (M/DBP) formation. The water quality research program will provide approaches and methods the Agency and its partners need to develop and apply criteria to support designated uses, tools to diagnose and assess impairment in aquatic systems, and tools to restore and protect aquatic systems.

In FY 2006, important areas of research emphasis will include: 1) arsenic treatment technologies for the removal of arsenic from small community drinking water systems; 2) immune response associated with exposures to waterborne pathogens (e.g., *Cryptosporidium*, Norwalk virus) and chemicals (e.g., arsenic, disinfection byproducts) that may contaminate drinking water; 3) habitat alteration; 4) treatment and contaminant transport and fate from biosolids; 5) reproductive health effects associated with exposures to DBPs; and 6) improved detection methods for pharmaceuticals and personal care products in effluents.

EPA manages its water-related research programs according to the Administration's

Investment Criteria for Research and Development. The Agency's detailed, externally-reviewed multi-year plans for its drinking water and water quality research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources. As part of the periodic multi-year plan revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the drinking water research program in the second quarter of FY 2005.

EPA's Science to Achieve Results (STAR) grants program is also managed according to the Investment Criteria for Research and Development, ensuring the quality of its extramural research through a competitive, peer-reviewed awards process. The STAR program engages the Nation's best scientists to provide high quality, innovative research and solutions to protect human health and the environment.

In FY 2006, a portion of EPA's water research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Water to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority water research needs.

Land Preservation and Restoration

Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.

STRATEGIC OBJECTIVES:

- By 2008, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.
- By 2008, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by
 - Cleaning up and restoring contaminated sites or properties to appropriate levels.
 - Through 2008, provide and apply sound science for protecting and restoring land by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 3.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations
Full-time Equivalents (FTE)
(Dollars in Thousands)

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request | FY 2006 Request v.FY 2005 Pres. Bud. |
|--|--------------------------------|-------------------------------|----------------------------|---|
| Land Preservation and Restoration | \$1,722,255.3 | \$1,805,990.8 | \$1,691,463.0 | (\$114,527.7) |
| Preserve Land | \$200,414.0 | \$239,585.1 | \$216,930.9 | (\$22,654.2) |
| Restore Land | \$1,450,870.8 | \$1,509,152.0 | \$1,416,681.8 | (\$92,470.2) |
| Enhance Science and Research | \$70,970.5 | \$57,253.7 | \$57,850.4 | \$596.7 |
| Total Workyears | 4,646.4 | 4,763.6 | 4,752.2 | -11.4 |

Left uncontrolled, hazardous and nonhazardous wastes on the land can migrate to the air, groundwater, and surface water, contaminating drinking water supplies, causing acute illnesses or chronic diseases, and threatening healthy ecosystems in urban, rural, and suburban areas. Hazardous substances can kill living organisms in lakes and rivers, destroy vegetation in contaminated areas, cause major reproductive complications in

wildlife, and otherwise limit the ability of an ecosystem to survive.

EPA leads the country's activities to reduce the risks posed by releases of harmful substances and by contaminated land. The most effective approach to controlling these risks incorporates developing and implementing prevention programs, improving response capabilities, and maximizing the effectiveness of response

and cleanup actions. This approach will help to ensure that human health and the environment are protected and that land is returned to beneficial use.

EPA will work to preserve and restore the land with the most effective waste management and cleanup methods available. EPA will use a hierarchy of approaches to protect the land: reducing waste at its source, recycling waste, and managing waste effectively by preventing spills and releases of toxic materials, and cleaning up contaminated properties. The Agency is especially concerned about threats to our most sensitive populations, such as children, the elderly, and individuals with chronic diseases.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund) and the Resource Conservation and Recovery Act (RCRA) provide the legal authority for most of EPA's work toward this goal. The Agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites and return the land to productive use. Under RCRA, EPA works in partnership with States and Tribes to address risks associated with leaking underground storage tanks and with the generation and management of hazardous and nonhazardous wastes at industrial facilities.

EPA also uses authorities provided under the Clean Air Act, Clean Water Act, and Oil Pollution Act of 1990 to protect against spills and releases of hazardous materials. Controlling the many risks posed by accidental and intentional releases of harmful substances presents a significant challenge to protecting the land. EPA's approach integrates prevention, preparedness, and response activities to minimize these risks. Spill prevention activities keep harmful substances from being released to the environment.

Improving its readiness to respond to emergencies through training, development of clear authorities, and provision of proper equipment will ensure that EPA is adequately prepared to minimize contamination and harm to the environment when spills do occur.

Four themes characterize EPA's land program activities under Goal 3: Revitalization; One Cleanup Program; Recycling, Waste Minimization and Energy Recovery; and Homeland Security.

- Revitalization: EPA and its partners are restoring contaminated land to make it economically productive or available as green space. Like the Agency's Brownfields program included under Goal 4, these revitalization efforts complement the Agency's traditional cleanup programs, and enable affected communities to reuse contaminated lands in beneficial ways. EPA is developing performance measures to assess its success in restoring and revitalizing sites under all its cleanup programs.
- One Cleanup Program: Through the One Cleanup Program, the Agency is looking across its programs to bring consistency and enhanced effectiveness to site cleanups. The Agency will work with its partners and stakeholders to enhance coordination, planning, and communication across the full range of Federal, State, tribal, and local cleanup programs. This effort will improve the pace, efficiency, and effectiveness of site cleanups, as well as more fully integrate land reuse and continued use into cleanup programs. The Agency will promote information technologies that describe waste site cleanup and revitalization information in ways that keep the public and stakeholders fully informed. Finally, the Agency will

develop environmental outcome performance measures that report progress among all cleanup programs, such as the number of acres able to be reused after site cleanup. A crucial element to this effort is a national dialogue, currently underway, on the future of Superfund and other EPA waste cleanup programs. A crucial element to this effort is a national dialogue, currently underway, on the future of Superfund and other EPA cleanup programs.

- Recycling, Waste Minimization and Energy Recovery: EPA's strategy for reducing waste generation and increasing recycling is based on (1) establishing and expanding partnerships with businesses, industries, States, communities, and consumers; (2) stimulating infrastructure development, environmentally responsible behavior by product manufacturers, users, and disposers ("product stewardship"), and new technologies; and (3) helping businesses, government, institutions, and consumers through education, outreach, training, and technical assistance.
- Emergency Preparedness, Response, and Homeland Security: EPA has a major role in reducing the risk to human health and the environment posed by accidental or intentional releases of harmful substances and oil. EPA will continue to improve its capability to effectively prepare for and respond to these incidents, working closely with other Federal agencies within the National Response System.

Controlling Risks to Human Health and the Environment at Contaminated Sites

EPA and its partners work to clean up contaminated land to levels sufficient to control risks to human health and the environment and to return the land to productive use. The Agency's cleanup

activities, some new and some well-established, include removing contaminated soil, capping or containing contamination in place, pumping and treating groundwater, and bioremediation.

EPA uses a variety of tools to accomplish cleanups: permits, enforcement actions, consent agreements, Federal facility agreements, and many other mechanisms. As part of EPA's One Cleanup Program Initiative, programs at all levels of government will work together to ensure that appropriate cleanup tools are used; that resources, activities, and results are coordinated with partners and stakeholders and communicated to the public effectively; and that cleanups are protective and contribute to community revitalization. The Agency's two major cleanup programs, Superfund and RCRA Corrective Action, now rely on similar human health and groundwater protection environmental indicators. Through the One Cleanup Program Initiative, EPA is working to coordinate across all of its cleanup programs, while maintaining the flexibility needed to accommodate differences in program authorities and approaches.

EPA fulfills its cleanup and waste management responsibilities on tribal lands by acknowledging tribal sovereignty and recognizing tribal governments as being the most appropriate authorities for setting standards, making policy decisions, and managing programs consistent with Agency standards and regulations. EPA and its partners follow four key steps to accomplish cleanups and control risks to human health and the environment: assessment, stabilization, selection of appropriate remedies, and implementation of remedies. EPA will continue to work with its Federal, state, tribal, and local government partners at each step of the process to identify facilities and sites requiring attention and to monitor changes in priorities.

Through strong policy, leadership, program administration, and a dedicated workforce, EPA's cleanup programs will merge sound science, cutting-edge technology, quality environmental information, and stakeholder involvement to protect the Nation from the harmful effects of contaminated property. To accomplish its cleanup goals, the Agency continues to forge partnerships and develop outreach and education strategies.

To meet its objective to control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and to make land available for reuse, EPA intends to achieve the following results in FY 2006: Thi

- Make 500 final site-assessment decisions under Superfund;
- Control all identified unacceptable human exposures from site contamination to at or below health-based levels for current land and/or groundwater use conditions at 10 of the Superfund human exposure sites;
- Control the migration of contaminated groundwater through engineered remedies or natural processes at 10 of the Superfund groundwater exposure sites;
- Select final remedies (cleanup targets) at 20 Superfund sites; and
- Complete construction of remedies at 40 Superfund sites.

EPA's enforcement program is critical to the Agency's ability to cleanup the vast majority of the nation's worst hazardous waste sites. This program secures cleanups from Potentially Responsible Parties (PRPs) at EPA's priority sites. The PRPs perform approximately 70% of the long-term cleanups and EPA uses appropriated dollars to pay for the other 30% of the long-term cleanups. If PRPs do not perform a cleanup, and EPA uses appropriated dollars to clean up sites, the enforcement program recovers EPA's expenditures from the PRPs.

The Agency has also been encouraging the establishment and use of Special Accounts within the Superfund Trust Fund. These accounts segregate site-specific funds obtained from responsible parties that complete settlement agreements with EPA. These funds can be provided as an incentive for other PRPs to perform work they might not be willing to perform or used by the Agency to fund cleanup. The result is the Agency can clean up more sites and allows the Agency to preserve appropriated Trust Fund dollars for other sites without viable PRPs.

This program pursues an "enforcement first" policy to ensure that sites for which there are viable responsible parties are cleaned up by those parties. In tandem with this approach, various reforms have been implemented to increase fairness, reduce transaction costs, and promote economic redevelopment. Enforcement maximizes PRP participation in cleanups while promoting fairness in the enforcement process, and recovering costs from PRPs when EPA expends funds. For more information regarding EPA's enforcement program, and its various components, please refer to www.epa.gov/compliance/cleanup/superfund/.

In FY 2006, the Agency will negotiate remedial design/remedial action cleanup agreements and removal agreements at contaminated properties. Where negotiations fail, the Agency will either take unilateral enforcement actions to require PRP cleanup or use appropriated dollars to remediate sites. When appropriated dollars are used to clean up sites, the program will recover this money from the PRPs. The Agency will also continue its efforts to establish and use Special Accounts to facilitate clean up.

By pursuing cost recovery settlements, the program promotes the principle that polluters should perform or pay for cleanups

preserves the Superfund Trust Fund resources for site remediation where there is no known or viable PRP. The Agency's expenditures will be recouped through administrative actions, CERCLA section 107 case referrals, and through settlements reached with the use of alternative dispute resolution.

EPA's financial management offices provide a full array of support services to the Superfund program including managing oversight billing for Superfund site cleanups and financial cost recovery.

Encouraging Land Revitalization and Reuse

The goals of the Land Revitalization Initiative are to restore and return contaminated, and potentially contaminated, properties to beneficial use for America's communities; to ensure that cleanups protect public health and the environment and that anticipated future uses are fully considered in all cleanup decisions; and to remove unintended barriers to the restoration and beneficial reuse of contaminated properties. To achieve this mission, EPA has been working over the last two years to develop a comprehensive approach to revitalization, and has developed and implemented a wide range of demonstration projects, redevelopment tools, and educational efforts. The Agency is also forming partnerships with States, Tribes, other Federal agencies, local governments, communities, landowners, lenders, developers, and parties potentially responsible for contamination that can help bring about reuse of formerly contaminated sites.

Usable land is a valuable resource. However, where contamination presents a real or perceived threat to human health and the environment, options for future land use at that site may be limited. EPA's cleanup programs have set a national goal of returning formerly contaminated sites to

long-term, sustainable, and productive use. This goal creates greater impetus for selecting and implementing remedies that, in addition to providing clear environmental benefits, will support reasonably anticipated future land use options and provide greater economic and social benefits.

Reducing and Recycling Waste

Preventing pollution before it is generated and poses harm is often less costly than cleanup and remediation. Source reduction and recycling programs can increase resource and energy efficiencies and thereby reduce pressures on the environment. RCRA directs EPA to minimize the amount of waste generated and to improve recovery and conservation of materials through recycling. To this end, EPA builds on partnerships with other Federal agencies; state, tribal, and local governments; business and industry; and non-governmental organizations. These voluntary partnerships provide information sharing, recognition, and assistance to improve practices in both public and private sectors.

EPA launched the Resource Conservation Challenge (RCC) as a major national effort to find flexible, yet more protective ways to conserve our valuable natural resources through waste reduction, energy recovery and recycling. Through the RCC, EPA challenges every American to prevent pollution and promote recycling and reuse, and conserve energy and materials. The RCC programs foster source reduction and recycling in business, industry, and government; encourage local adoption of economic incentives that further source reduction and recycling; reduce hazardous wastes containing priority chemicals; promote waste-based industries that concurrently create jobs; foster cost-effective recycling programs in communities and Tribes; enhance markets for recycled materials by increasing procurement of recycled-content products; encourage

innovative practices that result in more cost-effective source reduction and recycling; implement the President's Climate Change Action Plan; and provide information to assess and track progress in reaching national goals.

Reducing waste generation has clear benefits in combating the ever-growing stream of municipal solid waste (MSW). MSW includes waste generated from residences, commercial establishments, institutions, and industrial non-process operations. Annual generation of MSW grew steadily from 88 million to 232 million tons between 1960 and 2000.¹² In FY 2006, EPA's municipal solid waste program will implement a set of coordinated strategies, including source reduction (also called waste prevention), recycling (including composting), combustion with energy recovery, and landfilling. Preference will be given to strategies that maximize the diversion of waste from disposal, with source reduction (including reuse) as the highest priority.

To meet its objective for reducing materials use through product and process redesign, and increasing materials and energy recovery from wastes otherwise requiring disposal, EPA intends to achieve the following results in FY 2006:

- Maintain the national average municipal solid waste generation rate at no more than 4.5 pounds per person per day; and
- Divert 33.4 percent (80 million tons) of municipal solid waste from landfilling and combustion.

Recognizing that some hazardous wastes cannot be completely eliminated or recycled, the RCRA program works to reduce

exposure to hazardous wastes by maintaining a cradle-to-grave approach to waste management. The program's primary focus is to prevent hazardous releases from RCRA facilities and reduce emissions from hazardous waste combustion through a combination of regulations, permits and voluntary standards. State program authorization provides the States with primary RCRA implementation and enforcement authority; reduces overlapping and dual implementation by the States and EPA; provides the regulated community with one set of regulations; reduces overall Federal enforcement presence in the States; and can provide the opportunity for some of the newer, less-stringent RCRA regulations to be implemented by the States. To date, 48 States, Guam, and the District of Columbia are authorized to issue permits. Strong state partnerships, the authorization of States for all portions of the RCRA hazardous waste program, including regulations that address waste management issues contained in permits, and results-oriented state oversight are important goals.

In managing petroleum products properly, EPA works with States, Tribes and Intertribal Consortia to prevent, detect, and correct leaks into the environment from federally regulated underground storage tanks (USTs) containing petroleum and hazardous substances. Achieving significant improvements in release prevention and detection requires a sustained emphasis by both EPA and its partners. Because States are the primary enforcers of the UST program requirements, EPA has adopted a decentralized approach to UST program implementation by building and supporting strong state and local programs. Concerns about the use of fuel oxygenates (e.g., methyl tertiary butyl ether, or MTBE) in gasoline further underscores EPA's and the States' emphasis on promoting compliance with all UST requirements. EPA provides technical information, forums for

¹² US Environmental Protection Agency. *Municipal Solid Waste in the United States: 2001 Facts and Figures*, Executive Summary, U.S. Government Printing Office, Washington, DC, October 2003. Available online at www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm. Last updated November 5, 2003.

information exchanges and training opportunities to States, Tribes and Intertribal Consortia to encourage program development and/or implementation of the UST program.

To meet its objective for reducing releases to the environment by managing hazardous wastes and petroleum products properly, EPA intends to achieve the following results in FY 2006:

- Prevent releases from RCRA hazardous waste management facilities by increasing the number of facilities with permits or other approved controls by 2.5 percent over the FY 2005 level. At the end of FY 2004, 86 percent of the facilities had permits or other approved controls;¹³
- Increase the percentage of UST facilities that are in significant operational compliance with both release detection and release prevention (spill, overflow, and corrosion protection) requirements to 66 percent of the estimated universe of approximately 256,000 facilities; and
- Reduce the number of confirmed releases at UST facilities to 10,000 or fewer. (Between FY 1999 and FY 2004, confirmed releases averaged 12,641).

Emergency Preparedness, Response, and Homeland Security

EPA will continue to improve its emergency preparedness and response capability, particularly in terms of homeland security. EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. Under the multi-agency National Response System (NRS), EPA evaluates and responds to thousands of releases annually. EPA's primary role in the NRS is to serve as the

Federal On-Scene Coordinator (OSC) for spills and releases in the inland zone. As a result of NRS efforts, many major oil spills and releases of hazardous substances have been contained, minimizing the adverse impacts on human health and the environment.

An important component of EPA's land strategy is to prevent oil spills from reaching our Nation's waters. Under the Oil Pollution Act, the Agency requires certain facilities (defined in 40 CFR 112.2) to develop and implement spill prevention, control, and countermeasure (SPCC) plans. Compliance with these requirements reduces the number of oil spills that reach navigable waters and prevents detrimental effects on human health and the environment should a spill occur.

Each year, EPA personnel assess, respond to, mitigate, and clean up thousands of releases, whether accidental, deliberate, or naturally occurring. These incidents range from small spills at chemical or oil facilities to national disasters, such as hurricanes and earthquakes, to large-scale terrorist events.

EPA will work to improve its capability to respond effectively to incidents that may involve harmful chemical, oil, biological, and radiological substances. The Agency will explore improvements in field and personal protection equipment and response training and exercises; review response data provided in the "after-action" reports prepared by EPA emergency responders following a release; and examine "lessons learned" reports to identify which activities work and which need to be improved. Application of this information and other data will advance the Agency's state-of-the-art emergency response operations.

Responding to small and large-scale disasters is one of EPA's traditional responsibilities supported by the OSCs, the Environmental Response Team (ERT), and the National Decontamination Team (NDT).

¹³ Approximately 2,750 hazardous waste management facilities are currently regulated under RCRA. EPA plans to reassess this universe in FY 2006.

The Agency's crucial role in responding to the World Trade Center and Pentagon attacks, the decontamination of anthrax and ricin in a U.S. Senate Office Building, and the response to the Columbia shuttle disaster have further defined the nation's expectations of EPA's emergency response capabilities.

The FY 2006 President's Budget request includes additional funding to enable EPA to improve the capabilities of EPA's responders through procurement of state-of-the-art equipment, develop a new Environmental Laboratory Preparedness and Response (ELPR) program to strengthen such lab capabilities, support readiness for pre-deployments to national security special events, and develop decontamination protocols.

In FY 2006, EPA will continue to implement its homeland security plans and procedures and meet its responsibilities to respond to major hazardous substance, oil, weapons of mass destruction (WMD) or nationally significant terrorist incidents. EPA will prepare for the possibility of simultaneous attacks on more than one target and will implement the National Approach to Response (NAR), which is EPA's internal multi-faceted mechanism to effectively manage and conduct responses to nationally significant events. The NDT will improve its specialized decontamination capabilities to address chemical and biological and/or radiological agents in both environmental and building contamination situations. The ERT will provide training and specialized scientific, technical, and health and safety support to EPA's responders.

To meet its objective to reduce and control the risks posed by accidental or intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies, EPA intends to achieve the following results in FY 2006:

- Improve the Agency's emergency preparedness by achieving and maintaining the capability to respond to simultaneous large-scale emergencies and by improving response readiness by 10 percent from the previous year using the core emergency response criteria;
- Respond to 350 hazardous substance releases and 300 oil spills; and
- Inspect or conduct exercises or drills at approximately 100 oil storage facilities required to have Facility Response Plans.

Enhancing Science and Research to Restore and Preserve Land

The FY 2006 land research program supports the Agency's objective of reducing or controlling potential risks to human health and the environment at contaminated waste sites by accelerating scientifically-defensible and cost-effective decisions for cleanup at complex sites, mining sites, marine spills, and Brownfields in accordance with CERCLA. These research efforts will improve the range and scientific foundation for contaminated sediment remedy selection options by improving risk characterization and site characterization, and increasing understanding of different remedial options, in order to optimize environmental and human health protection and the cost-effectiveness of remedial decisions.

Funding for the Superfund Innovative Technology Evaluation (SITE) program will be reduced, existing contracts will be closed out, and the program will be terminated in FY 2006. As the Superfund program has matured, innovative approaches evaluated through the SITE program and other mechanisms have become standard tools for remediation. Additionally, the business of environmental remediation has matured and the private sector now offers many more

opportunities for vendors to promote their products and systems.

Multimedia decision-making and waste management constitute the two major areas of research under RCRA in FY 2006, as the Agency works toward preventing releases through proper facility management. Multimedia research will focus on resource conservation (e.g., electronic waste recycling and waste-derived products), corrective action, and multimedia modeling. Research will enhance sustainability by providing technical reports and technical support on methods to improve industrial and municipal waste management. Waste management research continues to advance multimedia modeling and uncertainty/sensitivity analyses methodologies that support core RCRA program needs as well as emerging RCRA resource conservation needs.

EPA manages its research to support land preservation and remediation programs according to the Administration's Investment Criteria for Research and Development. The Agency's detailed, externally-reviewed multi-year plans for its Contaminated Sites and RCRA-related research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources. As part of the periodic multi-year plan

revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the land protection and restoration research program in 2005.

In FY 2006, a portion of EPA's land preservation and restoration research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Solid Waste and Emergency Response to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority land preservation and restoration research needs.

Healthy Communities and Ecosystems

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

STRATEGIC OBJECTIVES:

- Prevent and reduce pesticide, chemical, and genetically engineered biological organism risks to humans, communities, and ecosystems.
- Sustain, clean up, and restore communities and the ecological systems that support them.
- Protect, sustain, and restore the health of natural habitats and ecosystems.
- Enhance the Nation's capability to prevent, detect, protect, and recover from acts of terror.
- Through 2008, provide a sound scientific foundation for EPA's goal of protecting, sustaining, and restoring the health of people, communities, and ecosystems by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 4.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations
Full-time Equivalents (FTE)
(Dollars in Thousands)

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request | FY 2006 Request v. FY 2005 Pres. Bud. |
|---|--------------------------------|-------------------------------|----------------------------|--|
| Healthy Communities and Ecosystems | \$1,222,772.7 | \$1,292,007.7 | \$1,336,247.8 | \$44,240.1 |
| Chemical, Organism, and Pesticide Risks | \$364,699.2 | \$366,759.0 | \$392,044.8 | \$25,285.8 |
| Communities | \$282,939.8 | \$324,792.2 | \$325,437.0 | \$644.8 |
| Ecosystems | \$155,528.1 | \$205,463.2 | \$203,902.9 | (\$1,560.2) |
| Enhance Science and Research | \$419,605.6 | \$394,993.3 | \$414,863.1 | \$19,869.8 |
| Total Workyears | 3,825.4 | 3,844.8 | 3,834.7 | -10.1 |

To promote healthy communities and ecosystems, EPA must bring together a variety of programs, tools, approaches and resources. The support of a multitude of stakeholders, along with strong partnerships with Federal, state, tribal and local governments, are necessary to achieve the

Agency's goal of protecting, sustaining or restoring healthy communities and ecosystems.

A key component of this goal is protecting human health and the environment by identifying, assessing, and reducing the potential risks presented by the thousands of

chemicals and pesticides on which our society and economy have come to depend. EPA must also address the emerging challenges posed by a growing array of biological organisms—naturally occurring and, increasingly, genetically engineered—that are being used in industrial and agricultural processes.

Biological agents are potential weapons that could be exploited by terrorists against the United States. EPA's pesticides antimicrobial program has been very responsive to addressing this threat. Antimicrobials play an important role in public health and safety. EPA is conducting comprehensive scientific assessments and developing test protocols to determine product safety and efficacy of products used against chemical and biological weapons of mass destruction, and registering products as necessary.

EPA programs under this Goal have many indirect benefits. For example, each year the Toxic Substances Control Act (TSCA) New Chemicals program reviews and manages the potential risks from approximately 1,800 new chemicals and 40 products of biotechnology that enter the marketplace. This new chemical review process not only protects the public from the possible immediate threats of harmful chemicals, but it has also contributed to changing the behavior of the chemical industry, making industry more aware and responsible for the impact these chemicals have on human health and the environment.

Americans come into daily contact with any number of chemicals that entered the market before the New Chemicals Program was established in 1978, yet relatively little is known about many of their potential impacts. Obtaining basic hazard testing information on large volume chemicals is one focus of EPA's work in the Existing Chemicals program. The voluntary High Production Volume program challenges

industry to develop chemical hazard data critical to enabling EPA, States, Tribes, and the public to screen chemicals already in commerce for any risks they may be posing. EPA's responsibility for managing the known risks of other chemicals centers on reducing exposure through proper handling or disposal.

The Acute Exposure Guideline Levels (AEGs) Program was designed by EPA to provide scientifically credible data to directly support chemical emergency planning, response, and prevention programs mandated by Congress. Emergency workers and first responders addressing accidental or intentional chemical releases need to know how dangerous a chemical contaminant may be to breathe or touch, and how long it may remain dangerous. The program develops short-term exposure limits applicable to the general population for a wide range of extremely hazardous substances (approximately 400).

This goal also focuses on geographic areas with human and ecological communities most at risk. For example, the Mexican Border is an area facing unique environmental challenges. At the Mexican Border, EPA addresses local pollution and infrastructure needs that are priorities for the Mexican and the U.S. governments under the Border 2012 agreement.

As the population in coastal regions grows, the challenges to preserve and protect these important ecosystems increase. Through the National Estuary Program, coastal areas have proved valuable grounds for combining innovative and community-based approaches with national guidelines and interagency coordination to achieve results.

Wetlands are among the most productive ecosystems in the world, comparable to rain forests and coral reefs. Yet the nation loses an estimated 58,000 acres per year, and existing wetlands may be degraded by

excessive sedimentation, nutrient enrichment, and other factors.¹⁴

In 2001 the Supreme Court determined that some isolated waters and wetlands are not regulated under the Clean Water Act. Many waters with important aquatic values may no longer be covered by CWA Section 404 protections. However, in FY 2006, EPA and the Army Corps of Engineers (CORPS) will continue to strive towards the Administration's commitment of "no net loss" of wetlands in the United States.

Large water bodies like the Gulf of Mexico, the Great Lakes, and the Chesapeake Bay are surrounded by industrial and other development and have been exposed to substantial pollution over many years at levels higher than current environmental standards permit. As a result, the volume of pollutants in these water bodies has exceeded their natural ability to restore balance. Working with stakeholders, EPA has established special programs to protect and restore these unique resources by addressing the vulnerabilities for each.

EPA's Brownfields Initiative to clean up brownfields and return them to use funds pilot programs and other research efforts; clarifies liability issues; enters into Federal, state and local partnerships; conducts outreach activities; and creates related job training and workforce development programs.

The Agency will continue to support the National Environmental Justice Advisory Council (NEJAC) which provides the Agency significant input from interested stakeholders such as community-based organizations, business and industry,

¹⁴ Dahl, T.E. 1990. *Status and Trends of Wetlands in the Conterminous United States, 1986 to 1997*. Washington, DC: U.S. Department of the Interior, U.S. Fish and Wildlife Service. Available online at: <http://wetlands.fws.gov/bha/SandT/SandTReport.html>: Report to Congress on the Status and Trends of Wetlands in the Conterminous United States, 1986 to 1997.

academic institutions, State, tribal and local governments, non-governmental organizations and environmental groups.

EPA also has a responsibility to ensure that efforts to reduce potential environmental risks are based on the best available scientific information. Strong science allows identification of the most important sources of risk to human health and the environment as well as the best means to detect, abate, and avoid possible environmental problems, and thereby guides our priorities, policies, and deployment of resources. Under Goal 4, EPA will conduct research in many areas, including emerging areas such as biotechnology and computational toxicology, to help develop better understandings and characterizations of positive environmental outcomes related to healthy communities and ecosystems.

In coordination with our state and tribal co-regulators and co-implementers and with the support of industry, environmental groups, and other stakeholders, EPA will use multiple approaches to address risks associated with chemicals and pesticides. Improving communities' ability to address local problems is a critical part of our efforts to reduce risk.

Pesticides and Chemicals Programs

EPA will continue using both voluntary and regulatory approaches to address risks associated with the use of pesticides in the home, work environment and agricultural settings. These approaches include identifying and assessing potential risks from pesticides, setting priorities for addressing these risks, strategizing for reducing these risks, and promoting innovative and alternative measures of pest control, such as environmental stewardship/integrated pest management (IPM). In addition, EPA will strengthen education and training of workers and the public and promote the registration and use

of reduced risk pesticides.

EPA will make progress towards its objective of protecting human health, communities and ecosystems from pesticide use by focusing on meeting our Food Quality Protection Act (FQPA) statutory mandate of completing the assessment of all existing tolerances (9,721). This process includes the issuance of all food use Reregistration Eligibility Decisions (REDs). These regulatory actions will ensure that pesticides on the market and the associated tolerance residues remain safe for the public and the environment. EPA will also continue identifying candidates for countering potential bioterrorist use of pesticides and biopesticides.

EPA plans to emphasize the continuation and further development of programs for the review of new and existing chemicals. On the new chemicals front, the Agency will continue to carry out its mandate to review

“Sustainable Futures” program encourages chemical manufacturers to apply pollution prevention techniques in the design of new chemicals, so that chemicals entering the new chemical review process will be less hazardous and less risky.

In addressing chemicals that have entered the market before the inception of the new chemical review program, EPA will continue to implement its voluntary High Production Volume (HPV) Chemicals Program, which challenges industry to develop chemical hazard data on existing chemicals that it chooses to “sponsor.” This will enable EPA and the public to screen many chemicals already in commerce for risks they may be posing. Complementing HPV is the Voluntary Children’s Chemical Evaluation Program (VCCEP), a high-priority screening program targeting existing chemicals believed to have particular impact on children’s health. We will make special efforts to assess the potential risks of newly

| *TOLERANCE REASSESSMENT SUMMARY BREAKDOWN | | | | |
|--|------------------------------------|---------------------------------------|-----------------------------|------------------------------|
| Category | Tolerances to be Reassessed | Total Reassessed as of 7/20/04 | Tolerances Remaining | Percentage Reassessed |
| Organophosphates | 1691 | 1131 | 560 | 66.88% |
| Carbamates | 545 | 305 | 240 | 55.96% |
| Organochlorine | 253 | 253 | 0 | 100% |
| Carcinogen | 2008 | 1329 | 679 | 66.19% |
| High Hazard Inert | 5 | 3 | 2 | 60.00% |
| Other | 5219 | 3723 | 1496 | 71.33% |
| TOTALS | 9721 | 6744 | 2977 | 69.37% |

*EPA’s Tolerance Index. Tolerance Tracking Svstems and Tolerance Reassessment Database.

potential risks from newly manufactured or imported chemicals before they are introduced to commerce. EPA’s

developed substitutes for a chemical category of emerging concern: brominated flame retardants. EPA is working to engage

stakeholders in a cooperative process to evaluate the efficacy and potential risks of developing flame retardants.

The Agency will continue to manage its programs to address specific chemicals of concern, including lead, mineral fibers, dioxin, mercury, polychlorinated biphenyls (PCBs), and persistent, bioaccumulative and toxic (PBT) chemicals generally. The lead program will shift its focus from oversight and rule development at the Headquarters level to regional oversight of activities supported through grant funding -- such as state-implemented lead-based paint training and certification programs and efforts targeted to high-risk areas -- and on implementation of a few of the highest priority regulatory and outreach efforts. EPA will continue to implement a national voluntary phase-out of PCB Large Capacitors and PCB Transformers, focusing on major Federal and private owners and operators of electrical equipment. Priorities include the identification of opportunities for replacement of older, less efficient equipment with newer, more efficient equipment and the accelerated phase-out of PCB-containing electrical equipment as supplemental environmental projects. The Agency will continue to work with the Maritime Administration (MARAD) in order to dispose of its fleet of obsolete ships containing equipment that uses PCBs.

The Agency will continue Homeland Security activities focused on identifying and reviewing proposed pesticides for use against pathogens of greatest concern for crops, animals, and humans in advance of their potential introduction, including testing of antimicrobial products to determine which are effective against human pathogens. If the safety concerns are met, and the product is effective (in the case of antimicrobials), EPA can approve use of the product. Close cooperation with other Federal agencies and industry will continue

in order to carry out these activities which directly respond to requirements in Homeland Security Presidential Directives 9 and 10. Additionally, EPA's Acute Exposure Guideline Levels (AEGLs) program will continue to develop proposed AEGL values.

The Toxic Release Inventory (TRI) program provides the public with information on the releases and other waste management of toxic chemicals. Two laws, Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 6607 of the Pollution Prevention Act (PPA), mandate that EPA annually collect information on listed toxic chemicals from certain industries and make the information available to the public through various means, including a publicly accessible national database.

Mexico Border Water Quality

The United States and Mexico have a long-standing commitment to protect the environment and public health in the U.S.-Mexico Border Region. The U.S.-Mexico Border 2012 Program, a joint effort between the U.S. and Mexican governments, will work with the 10 border States and with border communities to improve the region's environmental health using the *Border 2012 Plan*. Under this *Plan*, EPA expects to take several key actions to improve water quality and protect public health.

- **Core Program Implementation:** EPA will continue to implement core programs under the Clean Water Act (CWA) and related authorities, ranging from discharge permit issuance, to watershed restoration, to nonpoint pollution control.
- **Wastewater Treatment Financing:** Federal, state, and local institutions participate in border area efforts to improve water quality through the

construction of infrastructure and development of pretreatment programs. Specifically, Mexico's National Water Commission (CNA) and EPA provide funding and technical assistance for project planning and construction.

- **Build Partnerships:** Since 1995, the NAFTA-created institutions, the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank), have had the primary role in working with communities to develop and construct infrastructure projects. In FY 2006, EPA will establish a workgroup with Mexico to develop a workplan to define specific steps needed to accomplish the water quality improvement goals expressed in the Border 2012 Plan.

Protection and Restoration of Ecosystems

The National Estuary Program (NEP) is a key tool for restoring and protecting the quality of the nation's ecosystems. The NEP provides inclusive, community-based planning and action at the watershed level and has an established record of improvements to ecosystem conditions.

A top priority in FY 2006 is to continue supporting the efforts to implement Comprehensive Conservation and Management Plans in all 28 NEP estuaries. A critical measure of success is the number of priority actions in these plans that have been initiated and the number that have been completed. EPA created a baseline to track priority actions in 2004 and now tracks implementation of actions.

The health of the Nation's estuarine ecosystems also depends on the maintenance of high-quality habitat. Diminished and degraded habitats are less able to support healthy populations of wildlife and marine organisms and perform the economic, environmental, and aesthetic functions on

which coastal populations depend for their livelihood. A key success has been the restoration of over 500,000 acres of habitat over the past decade. For 2006, EPA has set a goal of protecting or restoring an additional 25,000 acres of habitat within the 28 study areas.

Finally, EPA will work with National Estuary Programs in FY 2006 to improve information about conditions in the estuaries. Starting in FY 2005, each program will have indicators in place to track environmental trends in the estuary. In FY 2006, EPA will develop and issue a baseline report on the condition of NEP estuaries modeled after the National Coastal Condition Report.

Wetlands Protection

Wetlands are among our Nation's most critical and productive natural resources. They provide a variety of benefits, such as water quality improvements, flood protection, shoreline erosion control, and ground water exchange. Wetlands are the primary habitat for fish, waterfowl, and wildlife, and as such, provide numerous opportunities for education, recreation, and research. EPA recognizes that the challenges the Nation faces to conserve our wetland heritage are daunting and that many partners must work together for this effort to succeed. EPA's strategy for meeting wetland goals in FY 2006 is described below.

- **Net Gain Goal:** Meeting the "net gain" element of the wetland goal will be accomplished by other Federal programs (Farm Bill agriculture incentive programs and wetlands acquisition and restoration programs, including those administered by Fish and Wildlife Service) and non-Federal programs. EPA contributes to achieving no overall net loss through EPA's regulatory programs, including the Clean Water Act

Section 404/401 permit review, compliance and enforcement, and other programs. EPA will also support States, Tribes, and others to protect and restore wetlands and build capacity to increase wetland functionality.

In implementing these responsibilities, each Region will identify watersheds where wetlands and other aquatic resources are most at risk, including from cumulative impacts. EPA will improve levels of protection through actions that include: working with and integrating wetlands protection into other EPA programs such as Section 319, State Revolving Fund, National Estuary Program; working with the Corps of Engineers (COE) and/or States on permitting and mitigation compliance; providing grants and technical assistance to state, tribal or local organizations; and developing information, education and outreach tools.

- **No Net Loss:** Building upon the analysis of existing mitigation data base systems, the Corps, EPA, USDA, DOI, and NOAA will establish a shared mitigation database by FY 2005. Utilizing the shared database, the Agencies will provide an annual public report card on compensatory mitigation to complement reporting of other wetlands programs. To help ensure no net loss of aquatic resources the Corps has initiated six new performance measures designed to improve permitting and mitigation compliance, including compliance inspections and audits, and resolution of enforcement actions.

EPA will work with the COE to ensure application of the 404(b)(1) guidelines, which require that discharges into waters of the U.S. be avoided and minimized to the

extent practicable. Each Region will also identify opportunities to partner with the Corps in meeting performance measures for compensatory mitigation for unavoidable impacts.

Targeted Watershed Grant Program

The Targeted Watersheds Grant Program, now in its third year, is designed to encourage successful community-based approaches and management techniques to protect and restore the nation's waters. This a competitive grant program predicated on the following fundamental principles of environmental improvement: collaboration, new technologies, market incentives, and results-oriented strategies. The organizations chosen to receive funds use the resources for a variety of restoration, protection and trading projects. Money is used to stabilize stream banks, demonstrate innovative nutrient management schemes, establish pollutant credits, and work with local governments and private citizens to promote sustainable practices and strategies. Grants range from \$300,000 to \$1,300,000, with an additional 25 percent leveraged from other sources.

Protecting the Great Lakes

As the largest freshwater system on the face of the earth (containing 20 percent of the earth's surface water and 90 percent of the surface water in the United States), the Great Lakes ecosystem holds the key to the quality of life and economic prosperity for tens of millions of people. While significant progress has been made to restore the environmental health of the Great Lakes, work remains.

Over the upcoming year, the local, state, tribal, and Federal Great Lakes Regional Collaboration will work together to develop a strategy to address Great Lakes water quality. The Regional Collaboration was

called for as part of the President's May 2004 Executive Order, directing EPA to establish the Great Lakes Task force to coordinate the Federal effort to improve water quality in the Great Lakes. The strategy will focus on outcomes like cleaner water and sustainable fisheries, and targeting measurable results and build upon priority setting work done by the eight Great Lakes governors and by partners to the *Great Lakes Strategy 2002: A Plan for the New Millennium*. Objectives of strategy include cleaning up and de-listing at least 10 Areas of Concern by 2010, a 25 percent reduction in PCB concentrations in lake trout and walleye, and restoration or enhancement of 100,000 acres of wetlands in the Great Lakes Basin. In FY 2006, EPA will give special attention to work in the following three areas:

- **Core Clean Water Programs:** While the Great Lakes face a range of unique pollution problems (extensive sediment contamination) they also face problem common to most other waterbodies around the country. Core clean water programs must be fully and effectively implemented throughout the Great Lakes Basin. EPA will focus on assuring that by 2008, 100 percent of the major, permitted discharges to the Lakes or major tributaries have permits that reflect the most current standards. In addition, EPA will focus on assuring that 95 percent of permits are consistent with the national Combined Sewer Overflow Policy.
- **Great Lakes Legacy Act:** Restoration of contaminated sediments around the Great Lakes is a critical step toward meeting water quality goals. In FY 2006, EPA will expedite work to address contaminated sediment. In FY 2006 EPA anticipates remediation efforts will result in cleanup of over one-quarter million cubic yards of contaminated

sediments, with cleanup beginning at approximately 6 sites.

- **Implementing Expanded Beach Safety Programs:** In FY 2006, EPA will work with States to both improve the state water quality standards for bacteria in recreational waters and to implement the BEACH Act (see Goal 2). EPA has a goal that 100percent of high priority beaches around the Great Lakes are served by water quality monitoring and public notification programs consistent with the BEACH Act guidance.

Chesapeake Bay Protection and Restoration

The Chesapeake Bay is the largest estuary in the United States and a water resource of tremendous ecological and economic importance. For over twenty years, efforts to protect and restore the Bay have been led by the Chesapeake Bay Executive Council—Bay area governors, the mayor of the District of Columbia; the EPA Administrator, and the chair of the Chesapeake Bay Commission, a tri-state legislative body. This unique regional partnership has defined environmental improvements needed in the Bay and developed a strategy that blends regulatory and voluntary processes.

One of the key measures of success in achieving improved Chesapeake Bay water quality will be the restoration of submerged aquatic vegetation. To achieve improved water quality needed to restore submerged aquatic vegetation, the Chesapeake Bay Program partners committed to reducing nutrient and sediment pollution loads sufficiently to remove the Bay and the tidal portions of its tributaries from the list of impaired waters. EPA and Bay area States have agreed to an approach to meeting restoration goals for Chesapeake Bay including the following key actions for FY

2006:

- **Implement Pollution Reduction Strategies:** States have developed pollution reduction strategies for each of the watersheds within the larger Bay watershed. These strategies define specific, localized approaches to meeting new state water quality standards and to restoring impaired waters by the year 2010. Although each strategy will describe a series of steps specifically designed for that watershed, most strategies will address the need for advanced treatment at sewage treatment plants, the need to reduce nutrients and sediments from farms, and the need to expand streamside buffers.
- **Core Programs in the Bay Area:** In addition to new watershed-specific strategies, EPA and state partners will continue to implement core clean water programs that are essential to maintaining past progress in improving the health of the Bay. For example, Bay area States will continue to provide low interest loans for the financing of sewage treatment systems and will continue to implement comprehensive, statewide programs for reducing nonpoint sources of pollution. The discharge permit program will provide controls on discharges from storm water facilities, confined animal feeding operations, sewage treatment plans and combined sewer overflows.

Protecting the Gulf of Mexico

The Gulf of Mexico basin has been called "America's Watershed." Its U.S. coastline is 1,630 miles, it is fed by thirty-three major rivers, and it receives drainage from 31 States in addition to a similar drainage area from Mexico. One sixth of the U.S. population now lives in Gulf Coast states. For FY 2006, EPA has worked with States and other partners to define key activities to

support attainment of environmental and health goals. These activities fall into three categories:

- **Core Clean Water Programs:** The Clean Water Act provides authority and resources that are essential to protecting water quality in the Gulf of Mexico and in the larger Mississippi River Basin that contributes pollution, especially oxygen demanding nutrients, to the Gulf. EPA will work with States to assure the continued effective implementation of core clean water programs, ranging from discharge permits, to nonpoint pollution controls, to wastewater treatment, to protection of wetlands.
- **Protecting and Restoring the Gulf of Mexico:** A central pillar of the strategy to restore the health of the Gulf is restoration of water quality and habitat in 12 priority coastal watersheds. These 12 watersheds include 354 of the impaired segments identified by States around the Gulf and will receive targeted technical and financial assistance to restore impaired waters. The 2008 goal is to fully attain water quality standards in at least 20 percent of these segments.
- **Reducing the Size of the Hypoxic Zone:** Any strategy to improve the overall health of the entire Gulf of Mexico must include a focused effort to reduce the size of the zone of hypoxic conditions (i.e. low oxygen in the water) in the northern Gulf. Actions to address this problem will need to focus on both localized addition of pollution to the Gulf and on controlling the loadings of nutrients from the Mississippi River.

In working to accomplish this goal, EPA and other Federal agencies will continue implementation of core clean water programs and partnerships among agencies; specific efforts in FY 2006 will include:

- Work with States to select a project watershed in each of the States in the Lower Mississippi River Basin to reduce nitrogen loadings to the lower Mississippi River;
- Work with States and other partners to identify "100 Highest Opportunity Watersheds" where nitrogen reduction strategies will be implemented;
- Implement the "Friends of the Gulf" award program to recognize corporations, organizations, or individuals that have taken effective, voluntary measures to reduce nutrient inputs; and
- Work with the private sector to support Industry Led Solutions for reducing both point and nonpoint sources.

Solid Waste and Emergency Response

To reduce or eliminate the potential risks associated with chemical releases, EPA must first identify and understand potential chemical risks and releases. EPA will use information generated by the Risk Management Program (RMP), Emergency Planning and Community Right-to-Know Act (EPCRA), and the Spill Prevention Control and Countermeasure (SPCC) program to supplement data on potential chemical risks and to develop voluntary initiatives and activities to reduce risk at high-risk facilities, priority industry sectors, and/or specific geographic areas. To meet its objective of protecting human health, communities, and ecosystems from chemical releases through facility risk reduction efforts and building community infrastructures, EPA, working with state and local implementing agencies, intends to complete 100 RMP audits in FY 2006.

EPA will collect information from the local emergency planning committees (LEPCs) during FYs 2004-2006 to determine the extent to which they have incorporated appropriate facility risk information into

their emergency preparedness and community right-to-know programs. This information will serve as a baseline from which EPA will track progress toward this strategic goal. EPA will also continue an initiative to improve and enhance emergency preparedness and prevention in tribal communities.

Brownfields

Economic changes over several decades have left thousands of communities with these contaminated properties and abandoned sites. Working with its state, tribal, and local partners to meet its objective to sustain, cleanup, and restore communities and the ecological systems that support them. Together with extension of the Brownfields tax credit, EPA intends to achieve the following results in FY 2006:

- Assess 1,000 Brownfields properties
- Clean up 60 properties using Brownfields funding
- Leverage \$1 billion in cleanup/redevelopment funding
- Leverage 5,000 jobs
- Train 200 participants, placing 65 percent in jobs

Community Action to Renew the Environment

EPA supports community-based, multi-media approaches to the reductions of toxics through the Community Action to Renew the Environment (CARE) program. This program fills a gap in our national programs which provide a broad level of basic health and environmental protection but which do not always sufficiently meet the needs of all communities, especially those which are overburdened by toxic pollutants. CARE works to reduce those risks through cost-effective, tailored and immediate actions. Grants will be awarded to provide funding for communities to organize and assess the risks in their community and to take action

to reduce those risks. The program also provides multi-media risk reduction and risk assessment tools, models to assist communities in identifying, prioritizing and reducing risks. This program will result in measurable results in the reduction of exposures to toxic pollutants including toxic chemicals, lead, pesticides and particulates, as well as a reduction in exposure to asthma triggers.

Smart Growth

The Smart Growth program achieves measurably improved environmental and economic outcomes by working with States, communities, industry leaders, and nonprofit organizations to minimize the environmental impacts of development. EPA provides tools, technical assistance, education, research and environmental data to help States and communities grow in ways that minimize environmental and health impacts and evaluate environmental consequences of various development patterns. EPA's Smart Growth activities and tools show community and government leaders how they can meet environmental standards through innovative community design and identify and research new policy initiatives to improve environmental quality by supporting environmentally friendly development patterns. In FY 06, EPA plans to build upon its work in Smart Growth outreach and direct implementation assistance.

EPA will also continue to coordinate smart growth work with EPA's Brownfield program to reuse and revitalize vacant and abandoned properties. EPA plans to continue developing incentives for brownfield redevelopment, provide direct assistance to communities working on brownfields, and maintain our education and outreach on innovative methods for brownfield redevelopment.

Research

EPA has a responsibility to ensure that efforts to reduce potential environmental risks are based on the best available scientific information. Strong science allows identification of the most important sources of risk to human health and the environment as well as the best means to detect, abate, and avoid possible environmental problems, and thereby guides our priorities, policies, and deployment of resources.

To enable the Agency to enhance science and research for human health, communities, and ecosystems through 2008, EPA will engage in high priority, multidisciplinary research efforts to improve understanding of the risks associated with: 1) human health and ecosystems; 2) mercury; 3) pesticides and toxics; 4) computational toxicology; 5) endocrine disruptors; 6) global change; and 7) homeland security. The Agency also is proposing an Advanced Monitoring Initiative (AMI) for FY 2006, which will bring the best monitoring data and information into environmental decision making to protect human health and the environment.

In FY 2006, EPA will continue research efforts on susceptible subpopulations to support the National Children's Study (NCS). The Agency will collaborate with the NCS Interagency Consortium to assess the early pre- and post-natal NCS results, and develop tools for characterizing environmental risks to young children and adolescents participating in the study.

Also, the Agency's human health risk assessment research program expects to produce 32 final and external review draft dose-response assessments of high priority chemicals in support of Program Office, Regional, state and tribal risk assessment needs. These include three assessments of microbial contaminant risks in support of Contaminant Candidate List (CCL)

regulatory determinations by EPA's Water program; and one final Air Quality Criteria Document (AQCD-ozone) and one external review draft AQCD (lead) to support National Ambient Air Quality Standards (NAAQS) decision-making.

In order to better understand the current condition of ecosystems, what stressors are changing that condition, what the effects are of those changes, and what can be done to prevent, mitigate, or adapt to those changes the Agency's ecosystems research will continue to develop approaches to identify and test the linkages between probability-based and targeted water quality monitoring programs, landscape characteristics, and the probability of water body impairment. Monitoring methods and decision support systems will continue being developed and diagnosis and forecasting models previously developed will be applied to provide a better scientific basis for ecosystem protection and restoration. In FY 2006 EPA will also continue research to evaluate the effectiveness of restoration options for aquatic ecosystems, with particular emphasis on options for the Mid-Atlantic Region and the western United States.

In the mercury research program, research will focus on evaluating the cost and performance of options to reduce mercury emissions from coal-fired utility boilers and further testing of continuous source emission monitors (CEMs). Work on control technologies will include pilot- and full-scale testing of systems that optimize mercury, SO₂, and NO_x control from the combustion of bituminous, sub-bituminous, and lignite coals and evaluation of the performance and cost of promising control technologies under development (e.g., new sorbents) and assessing how these technologies impact the characteristics of coal combustion residues.

EPA continues to make real progress in the

area of computational toxicology. In FY 2006, the Agency expects to deliver the first alternative assay for animal testing of environmental toxicants. This assay could be a replacement for a currently used animal-based assay in the Tier 1 screening battery of compounds that may disrupt the body's endocrine or hormonal systems. Also, under its endocrine disruptors research program, the Agency has developed and refined assays so that its Prevention, Pesticides, and Toxic Substances program has the necessary protocols to validate for use in the Agency's Endocrine Disruptors Screening Program and in FY 2006 will develop a report on a protocol to screen environmental chemicals for their ability to interact with the male hormone receptor.

EPA's homeland security research program supports the Administration's R&D priority of addressing our Nation's ability to prevent, detect, treat, remediate, and attribute acts of terrorism. Homeland Security research will continue to enhance the state of knowledge of potential threats, as well as response capabilities in accordance with Homeland Security Presidential Directives (HSPDs). Areas of emphasis will include decontamination and consequence management, water infrastructure protection, and threat and consequence assessment.

The Agency will also train the next generation of environmental scientists through its fellowship programs and seek to identify emerging risks and opportunities in nanotechnology through its Science to Achieve Results (STAR) program exploratory grants program.

EPA continues to work closely with the Administration's Climate Change Science Program (CCSP). EPA's Global Change Research Program is focused on understanding the potential consequences of global change with the goal of producing

information that can be readily used by policymakers to understand the various potential impacts of global change and to formulate strategies to effectively respond to the risks and opportunities presented by global change. In addition, EPA manages its basic research programs according to the Administration's Investment Criteria for Research and Development. Specifically, the Agency's detailed, externally-reviewed multi-year plans for its research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources.

As part of the periodic multi-year plan revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the ecosystems protection and human health research programs in the second quarter of FY 2005. EPA's Science to Achieve Results (STAR) grants program is also managed according to the Investment Criteria for Research and Development, ensuring the quality of its extramural research through a competitive, peer-reviewed awards process.

In FY 2006, a portion of EPA's pesticides and toxic substances research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be

provided to the Office of Prevention, Pesticides, and Toxic Substances to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority pesticides and toxic substances research needs.

In addition, two programs in this Goal have been reviewed through the Program Assessment Rating Tool (PART). The ecosystems protection research program is in the process of responding to PART recommendations, including developing outcome and efficiency measures. EPA will reassess the program in the spring of 2005. EPA also reviewed for the FY 2006 PART process EPA's endocrine disruptors program, which received an "Adequate" rating.

Enforcement and Compliance

EPA's continued enforcement efforts will be strengthened through the development of measures to assess the impact of enforcement activities, and assist in targeting areas that pose the greatest risks to human health or the environment; display patterns of noncompliance; and include disproportionately exposed populations. In addition, the EPA's enforcement program supports Environmental Justice efforts by focusing enforcement actions and criminal investigations on industries that have repeatedly violated environmental laws in minority and/or low-income areas.

Environmental Justice

EPA's environmental justice program will continue education, outreach, and data availability initiatives. The program provides a central point for the Agency to address environmental and human health concerns in minority and/or low-income communities, segments of the population that have been disproportionately exposed to environmental harms and risks. The

program will continue to manage the Agency's Environmental Justice Community Small Grants program that assists community-based organizations working to develop solutions to local environmental issues.

The Agency will continue to support the National Environmental Justice Advisory Council (NEJAC). The Council provides the Agency with significant input from interested stakeholders such as community-based organizations, business and industry, academic institutions, state, tribal and local governments, non-governmental organizations and environmental groups. The Agency will also continue to chair an Interagency Working Group (IWG) consisting of eleven departments and agencies, as well as representatives of These strategies include participation in bilateral programs (U.S.-Mexico and U.S.-Canada programs and the Border Environmental Cooperation Commission (BECC)), as well as cooperation with multinational organizations like the Commission for Environmental Cooperation, the World Trade Organization, and the World Health Organization. Strategies also include contributing to a set of measurable end points that will show reductions in pollutants of concern and pollutants at their origin, as well as exposure to our citizens along the US borders, thereby reducing the level of pollutants in the global atmosphere.

various White House offices, to ensure that environmental justice concerns are incorporated into all Federal programs.

International Affairs

Many human health and environmental risks to the American public originate outside our borders. Many pollutants can travel easily across borders - via rivers, air and ocean currents, and migrating wildlife. Even in the remote Arctic, industrial chemicals such as polychlorinated biphenyls (PCBs) have been found in the tissues of local wildlife. Further, differences in public health standards can contribute to global pollution. A chemical of particular concern to one country may not be controlled or regulated in the same way by another. EPA employs a range of strategies for achieving its goals.

Compliance and Environmental Stewardship

Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that promote environmental stewardship.

STRATEGIC OBJECTIVES:

- By 2008, maximize compliance to protect human health and the environment through compliance assistance, compliance incentives, and enforcement by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated, and achieving a 5 percent increase in the number of regulated entities making improvements in environmental management practices. (Baseline to be determined for 2005.)
- By 2008, improve environmental protection and enhance natural resource conservation on the part of government, business, and the public through the adoption of pollution prevention and sustainable practices that include the design of products and manufacturing processes that generate less pollution, the reduction of regulatory barriers, and the adoption of results-based, innovative, and multimedia approaches.
- Through 2008, assist all federally recognized Tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.
- Through 2008, strengthen the scientific evidence and research supporting environmental policies and decisions on compliance, pollution prevention, and environmental stewardship.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations
Full-time Equivalent (FTE)
(Dollars in Thousands)

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request | FY 2006 Request v. FY 2005 Pres. Bud. |
|---|--------------------------------|-------------------------------|----------------------------|--|
| Compliance and Environmental Stewardship | \$739,222.5 | \$735,342.5 | \$760,978.2 | \$25,635.7 |
| Improve Compliance | \$431,488.5 | \$438,530.6 | \$486,878.1 | \$48,347.5 |

| | FY 2004 Obligations | FY 2005 Pres. Bud. | FY 2006 Request | FY 2006 Request v. FY 2005 Pres. Bud. |
|---|--------------------------------|-------------------------------|----------------------------|--|
| Improve Environmental Performance through Pollution Prevention and Innovation | \$135,703.6 | \$147,593.1 | \$142,142.6 | (\$5,450.5) |
| Build Tribal Capacity | \$76,812.7 | \$79,625.8 | \$74,016.8 | (\$5,609.1) |
| Enhance Science and Research | \$95,217.6 | \$69,593.0 | \$57,940.7 | (\$11,652.3) |
| Total Workyears | 3,590.8 | 3,446.9 | 3,469.3 | 22.3 |

Throughout FY 2006, the Environmental Protection Agency will work to improve the nation's environmental protection practices, and to enhance natural resource conservation on the part of government, business, and the public. To accomplish these goals, the Agency will employ a mixture of effective inspection, enforcement and compliance assistance strategies; provide leadership and support for pollution prevention and sustainable practices; reduce regulatory barriers; and refine and apply results-based, innovative, and multimedia approaches to environmental stewardship and safeguarding human health.

In order to be effective, the EPA requires a strong enforcement and compliance program, one which identifies and reduces noncompliance problems; assists the regulated community in understanding environmental laws and regulations; responds to complaints from the public; strives to secure a level economic playing field for law-abiding companies; and deters future violations. The EPA will protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public to promote environmental stewardship. In addition, EPA will assist Federally recognized Tribes in assessing environmental conditions in Indian Country, and will help build their capacity to implement environmental programs. EPA will also strengthen the scientific evidence and research supporting environmental

policies and decisions on compliance, pollution prevention, and environmental stewardship.

Improving Compliance with Environmental Laws

Critical to the success of EPA's mission is a strong commitment to ensuring compliance with environmental laws and policies. Working in partnership with state and Tribal governments, local communities and other Federal agencies, in FY 2006 EPA will identify and address significant environmental and public health problems, strategically deploy its resources, and make use of integrated approaches to achieve strong environmental outcomes. In the context of the Enforcement and Compliance Assurance Program, these principles mean that we must be "smart" in the work that we do.

In order to meet the Agency's goals, its "smart enforcement" strategy employs an integrated, common-sense approach to problem-solving and decision-making. An appropriate mix of data collection and analysis; compliance monitoring, assistance and incentives; civil and criminal enforcement resources; and innovative problem-solving approaches are used to address significant environmental issues and achieve environmentally beneficial outcomes.

This approach also requires that the Agency develop and maintain strong and flexible partnerships with regulated entities and a well-informed public, in order to foster a climate of empowerment and shared responsibility for the quality of our nation's land, resources and communities. Thus the Agency can carefully target its enforcement and compliance assurance resources, personnel and activities to address the most significant risks to human health and the environment, and to ensure that certain populations do not bear a disproportionate environmental burden.

EPA's continued enforcement efforts will be strengthened through the development of measures to assess the impact of enforcement and compliance activities; assist in targeting areas that pose the greatest risks to human health or the environment; display patterns of noncompliance; or include disproportionately exposed populations. Further, EPA cooperates with states and the international community to enforce and ensure compliance with cross-border environmental regulations, and to help build their capacity to design and implement effective environmental regulatory, enforcement and Environmental Impact Assessment programs.

Compliance Assistance and Incentives: The Agency's Enforcement and Compliance Assurance Program uses compliance assistance and incentive tools to encourage compliance with regulatory requirements, and to reduce adverse public health and environmental problems. To achieve compliance, the regulated community must first understand its obligations, and then learn how to best comply with regulatory obligations. Throughout FY 2006 EPA will support the regulated universe by working to assure that requirements are clearly understood, and will help industry to

identify cost-effective innovative, cost-effective compliance options. EPA also enables other assistance providers (e.g., states, universities) to provide compliance information to the regulated community.

Compliance Monitoring: The Agency reviews and evaluates the activities of the regulated community, to determine compliance with applicable laws, regulations, permit conditions and settlement agreements, and to determine whether conditions presenting imminent and substantial endangerment exist. The majority of work years devoted to compliance monitoring are provided to the Agency's regional offices to conduct investigations and on-site inspections, and perform monitoring, sampling and emissions testing. FY 2006 Compliance Monitoring activities will be both environmental media- and sector-based. The traditional media-based inspections compliment those performed by states and Tribes, and are a key part of our strategy for meeting the long-term and annual goals established for the air, water, pesticides, toxic substances, and hazardous waste environmental goals included in the EPA Strategic Plan.

Enforcement: The Enforcement Program addresses violations of environmental laws, to ensure that violators come into compliance with Federal laws and regulations. In FY 2006 the program will work to achieve the Agency's environmental goals through consistent, fair and focused enforcement of all environmental statutes. The overarching goal of the Enforcement program is to protect human health and the environment, targeting its actions according to degree of health and environmental risk. Further, it aims to level the economic playing field by ensuring that violators do not realize an economic benefit from non-compliance, and also seeks to deter future violations.

Auditing and Evaluation Tools:

Maximum compliance requires the active efforts of the regulated community to police itself. Throughout FY 2006 EPA will continue to investigate options for encouraging self-directed audits and disclosures. It will also continue to measure and evaluate the effectiveness of Agency programs in improving compliance rates and provide information and compliance assistance to the regulated community. Further, the Agency will maintain its focus on developing innovative approaches through better communication, fostering partnerships and cooperation, and the application of new technologies.

Partnering: State, Tribal and local governments bear much of the responsibility for ensuring compliance, and EPA works in partnership with them and other Federal agencies to promote environmental protection.

EPA also develops and maintains productive partnerships with other nations, to enable and enforce compliance with U.S. environmental standards and regulations.

Improving Environmental Performance through Pollution Prevention

EPA will work to bring about a performance-oriented regulatory system that develops innovative, flexible strategies to achieve measurable results; promotes environmental stewardship in all parts of society; supports sustainable development and pollution prevention; and fosters a culture of creative environmental problem solving.

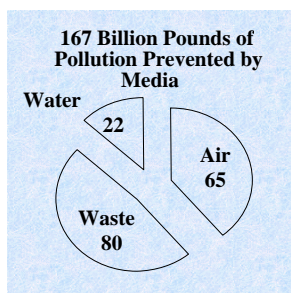
Partnering with Businesses and Consumers:

In 2006, through the Pollution Prevention (P2) program, EPA will continue to encourage, empower, and assist government and business to “green” the nation’s supply and demand structures to make them more environmentally sound. Through the Environmentally Preferable Purchasing Program, the Agency will help Federal agencies identify and procure those products that generate the least pollution, consume fewest non-renewable natural resources, and constitute the least threat to human health and to the environment. EPA’s innovative Green Suppliers Network Program works with large manufacturers to increase energy efficiency; identify cost-saving opportunities; optimize resources and technology through the development of sound business approaches incorporating pollution prevention; and to promote those approaches among their numerous suppliers.



“An Ounce of Pollution Prevention is Worth Over 167 Billion Pounds of Cure”

A Decade of Pollution Prevention Results, 1990-2000



Resources Conserved

- 215 million kWh of energy
- 4.1 billions gallons of water
- \$666 million in cost savings

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Partnering with Industry: The EPA will continue to reduce the amount of toxic chemicals in use by encouraging the design of alternative less-toxic chemicals and industry processes through its Green Chemistry and Green Engineering Programs. New emphasis will be placed on the development of environmentally preferable substitutes for emerging chemicals of concern such as brominated flame retardants, perfluorinated acids, and chemicals which are persistent in the environment, toxic, and capable of accumulating in animal, fish, and human tissue. In conjunction with the efforts of the Green Chemistry and Green Engineering Programs, the Design for the Environment Program will continue collaborative partnerships with industries to develop safer products, processes and technologies.

Pollution Prevention Grant Program: Pollution Prevention Grants to states and Tribes enable them to provide technical assistance, education and outreach to assist businesses and industries in identifying strategies and solutions to reduce wastes and pollution at the source. In 2006, EPA plans to enhance its P2 grant management system by incorporating pollution prevention metrics that capture quantifiable environmental results within individual work plans, and by sharing those results regionally and nationally.

NEPA Federal Review: EPA fulfills its uniquely Federal responsibilities under the National Environmental Policy Act (NEPA) by reviewing and commenting on other Federal agency environmental impact statements (EISs). NEPA requires that Federal agencies prepare and submit EISs to identify potential environmental consequences of major proposed activities, and develop plans to mitigate or eliminate negative impacts. The Enforcement and

Compliance Assistance Program maximizes its use of NEPA review resources by targeting its efforts toward potentially high-impact projects, thereby promoting cooperation and innovation, and working towards a more streamlined review process.

Environmental Information Exchange Network: The Exchange Network Grant Program provides funding to states, territories, Tribes, and Tribal consortia to help them develop the information management and technology (IM/IT) capabilities they need to participate in the Environmental Information Exchange Network (Exchange Network); define common data standards, formats, and trading partner agreements for sharing data over the Exchange Network; and the plan, develop, and implement collaborative, innovative uses of the Exchange Network.

Promoting Environmental Stewardship and Innovation

In FY 2006, EPA will encourage and support states, Tribes, communities and businesses to “go beyond compliance” with environmental regulations, and to practice and promote environmental stewardship. EPA will accomplish its goals using the next generation of voluntary innovative environmental protection strategies. The Agency will work with states, businesses, and communities to develop the “next generation” of environmental protection, one that focuses more on results than process, and promotes business practices that are both environmentally and economically sustainable. EPA will focus on five areas of work under its innovation strategy:

- Promote innovative leadership through new ideas, creative partnerships, and sound analysis;

- Encourage environmental stewardship in businesses;
- Promote stronger facility-level environmental management, including Environmental Management Systems (EMSs);
- Improve environmental performance of selected business sectors; and
- Improve program efficiency through increased evaluation and measurement.

Innovation Grant Program: EPA will continue to award Innovation Grants to states and Tribes to encourage testing innovative environmental protection strategies, such as permit streamlining; development of environmental management systems that promote the use of innovative technologies for better environmental results; and other projects that demonstrate improved efficiencies in environmental management.

Performance Grant Fund: For FY 2006 EPA proposes a new competitive state and Tribal Performance Grant Fund to support results-oriented environmental protection work. The grants will help states and Tribes measure, document and improve the results of their environmental protection programs. The Fund will support state work with businesses, non-profit organizations and communities to pursue alternative means of compliance and performance through a variety of means. These include pollution prevention, changes in business processes, product stewardship, technical and compliance assistance, recycling and pollution trading. The Fund will also support geographic, ecosystem, and regulatory program performance improvement initiatives.

Performance Track: One of EPA's most successful voluntary programs, Performance Track recognizes and rewards private and

public facilities that demonstrate levels of environmental performance that exceed current requirements. Performance Track membership is steadily growing, as more and more businesses recognize the benefits of the program, and see that their participation "makes good business sense." EPA will continue to recruit facilities to participate in Performance Track, and provide assistance to those facilities to improve their environmental performance. In FY 2006 Performance Track members will collectively achieve an annual reduction of: 900 million gallons in water use; 7,000,000 MMBTUs in energy use; 20,000 tons in materials use; 300,000 tons of solid waste; 35,000 tons of air releases; and 10,000 tons in water discharges.

Sector-based Stewardship: In FY 2006 EPA will continue to work with the following industrial business sectors: agribusiness, cement manufacturing, construction, forest products, iron and steel manufacturing, paint and coatings, ports, shipbuilding, metal finishing, die casting and meat processing. EPA will work with national representatives of these business sectors to set pollution reduction goals, measure performance, provide environmental protection tools and technical assistance, remove barriers, develop incentives, reduce regulatory burdens and test innovative strategies.

Small Business Ombudsman: EPA will continue to support the Small Business Ombudsman program, which serves as EPA's gateway and leading advocate for small business issues.



The Agency will partner with state Small Business Assistance Programs, and hundreds of small business and trade associations, to reach out to the small business community. These partnerships provide the information and perspective EPA needs to help small businesses achieve their environmental goals, and gives businesses access to networks, advocacy resources, tools and educational forums.

Building Tribal Capacity

Since adoption of the EPA Indian Policy in 1984 EPA has worked with Tribes on a government-to-government basis, one that affirms the Agency's trust responsibility over federally recognized Tribes and Tribal governments. Under Federal environmental statutes, the Agency has responsibility for assuring human health and environmental protection in Indian communities. EPA has worked to establish the internal infrastructure and organize its activities in order to meet this responsibility. The creation of EPA's American Indian Environmental Office (AIEO) in 1994 took responsibility for such efforts and was a further step in ensuring environmental protection in Indian Country. EPA's strategy for achieving this Objective has three major components:

Establish an Environmental Presence in Indian Country: The Agency will work to create an environmental presence for each Federally recognized Tribe. In FY 2006, using Tribal GAP grant resources EPA will provide approximately 510 Federally recognized Tribes and InterTribal Consortia access to resources to hire at least one person working in their community to build a strong, sustainable environment for the future. Tribal communities can then assess environmental conditions on their lands, and build an environmental program tailored to their specific needs. In addition to assisting

in the building of Tribal environmental capacity, another key role of this workforce is to alert EPA of immediate public health and ecological threats, so that EPA can work with the Tribe to respond quickly and effectively.

Provide Access to Environmental Information: EPA will provide the information needed by Tribes to meet EPA and Tribal environmental priorities. At the same time, ensure that the Agency has the ability to view and analyze the conditions on Indian trust lands, and the impacts of EPA and tribal actions and programs on Indian trust lands.

Implementation of Environmental Goals: The Agency will provide opportunities for the implementation of Tribal environmental programs by Tribes, or directly by EPA, as necessary.

The Agency continues to take advantage of new technology to establish direct links to the U.S. Geological Service, Bureau of Reclamation, Indian Health Service, and other Federal agency data systems, to further the development of an integrated, comprehensive, multi-agency Tribal Enterprise Architecture. The Agency continues to formalize interagency data standards and protocols to ensure quality information is collected and reported consistently among the Federal agencies. To this end, EPA has adopted Tribal Identifier codes that will enable data systems to identify Tribal sources of information. In FY 2006, EPA will integrate 10 existing Agency data systems and assist other agencies to adopt these common codes.

Pollution Prevention and Enforcement Research

Pollution Prevention: Over the past several years the Agency has increasingly focused on preventative and sustainable

approaches to health and environmental problems. Sustainable approaches require: (1) innovative design and production techniques that minimize or eliminate environmental liabilities; (2) integrated management of air, water, and land resources; and (3) changes in the traditional methods of creating and distributing goods and services. EPA remains committed to helping industry achieve these ideals while at the same time adopting more effective and efficient practices, materials, and technologies.

In FY 2006, research will explore the principles governing sustainable systems and the integration of social, economic, and environmental objectives in environmental assessment and management. The Agency will also assess the interactions between various stressors that threaten human and environmental health, and will work to develop innovative and cost-effective responses. In a broader context, the program will focus not just on the industrial sectors, but other areas critical to stewardship, e.g., municipal sector and ecosystems. FY 2006 research will also develop tools and methodologies to prevent pollution at its source and evaluate the performance of innovative environmental technologies through the Environmental Technology Verification (ETV) program.

EPA manages its compliance and environmental stewardship research programs according to the administration's Investment Criteria for Research and Development. Specifically, the agency is in the process of revising its pollution prevention multi-year plan to emphasize sustainability. This multi-year plan will describe clear goals and priorities. As part of this effort, EPA will identify the appropriate outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes for this program. In

FY 2005, EPA will continue to implement a program of regular evaluations by independent and external panels, to provide prospective and retrospective review of programs' relevance, quality, and performance, including the programs' design and performance goals.

EPA also conducts Economics and Decision Sciences (EDS) research to improve decision making, cost-benefit analyses, and implementation strategies. In FY 2006, EDS research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Policy, Economics and Innovation to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority economics and decision science research needs.

Forensics Support: The Agency's Forensic Support program provides specialized scientific and technical support for the nation's most complex civil and criminal enforcement cases, and provides technical expertise for non-routine Agency compliance efforts. In FY 2006, efforts to stay at the forefront of environmental enforcement will include the refinement of successful multi-media inspection approaches; use of customized laboratory methods to solve unusual enforcement case problems; applied research and development for both laboratory and field applications, and further development of electronic data analysis methods for use investigative support related to computers and data fraud.

The Agency's Forensics program also will continue development of emerging

technologies in field and laboratory analytical technique, and evaluate the scientific basis and/or technical enforceability of select EPA regulations. EPA's National Enforcement Investigations Center (NEIC) is the only accredited

environmental forensics center in the nation; in FY 2006 the Center will also continue to function under more stringent International Standards of Operation for environmental data measurements to maintain its accreditation.

COORDINATION WITH OTHER AGENCIES ENVIRONMENTAL PROGRAMS

Goal 1- Clean Air and Global Climate Change

Objective: Healthier Outdoor Air

EPA cooperates with other Federal, state, Tribal, and local agencies in achieving goals related to ground level ozone and PM. EPA continues to work closely with the Department of Agriculture and the Forest Service in developing its burning policy and reviewing practices that can reduce emissions. EPA, the Department of Transportation (DOT), and the Army Corps of Engineers work with state and local agencies to integrate transportation and air quality plans, reduce traffic congestion, and promote livable communities. EPA continues to work with the Department of the Interior, National Park Service, in developing its regional haze program and deploying the IMPROVE visibility monitoring network. The operation and analysis of data produced by the PM monitoring system is an example of the close coordination of effort between the EPA and state and Tribal governments.

For pollution assessments and transport, EPA is working with the National Aeronautics and Space Administration (NASA) on technology transfer using satellite imagery. In FY 2006, EPA will be working to further distribute NASA satellite products to and NOAA air quality forecast products to Regions, states, local agencies, and Tribes to provide better understanding of air quality on a day-to-day basis and to assist with PM forecasting. EPA will also work with NASA in FY 2005 to develop a better understanding of PM formation using satellite data. EPA works with the Department of the Army, Department of Defense on advancing emission

measurement technology and with the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce for meteorological support for our modeling and monitoring efforts.

To better understand the magnitude, sources, and causes of mobile source pollution, EPA works with the Departments of Energy (DOE) and Transportation (DOT) to fund research projects. A program to characterize the exhaust emissions from light-duty gasoline vehicles is being co-funded by DOE and DOT. Other DOT mobile source projects include TRANSIMS (TRansportation ANalysis and SIMulation System) and other transportation modeling projects; DOE is funding these projects through the National Renewable Energy Laboratory. EPA also works closely with DOE on refinery cost modeling analyses and the development of clean fuel programs.

For mobile sources program outreach, the Agency is participating in a collaborative effort with DOT's Federal Highway Administration and the Federal Transit Administration designed to educate the public about the impacts of transportation choices on traffic congestion, air quality, and human health. This community-based public education initiative also includes the Centers for Disease Control. In addition, EPA is working with DOE to identify opportunities in the Clean Cities program.

EPA also works with other Federal agencies such as the U.S. Coast Guard on air emission issues. Other programs targeted to reduce air toxics from mobile sources are coordinated with DOT. These partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country. To develop new

continuous source monitoring technology for toxic metals emitted from smokestacks, EPA has partnered with the Department of Defense (DOD). This partnership will provide a new source monitoring tool that will streamline source monitoring requirements that a number of DOD incinerators are required to meet and improve the operation of DOD incinerators with real-time emissions information resulting in reduced releases of air toxics to the environment. In time, this technology is expected to be available for use at non-DOD facilities.

For the clean fuel programs, EPA works closely with the DOE on refinery cost modeling analyses. For mobile sources program outreach, the Agency is participating in a collaborative effort with DOT's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) designed to educate the public about the impacts of transportation choices on traffic congestion, air quality, and public health. This community-based public education initiative also includes the Centers for Disease Control (CDC). In addition, EPA works with DOE to identify opportunities in the Clean Cities program. EPA also works cooperatively with DOE to better characterize gasoline PM emissions and characterize the contribution of gasoline vehicles and engine emissions to ambient PM levels.

To reduce air toxic emissions that do not inadvertently increase worker exposures, EPA is continuing to work closely with the Department of Labor's Occupational Safety and Health Administration (OSHA) to coordinate the development of EPA and OSHA standards. EPA also works closely with other health agencies such as the CDC, the National Institute of Environmental Health Sciences (NIEHS), and the National Institute for Occupational Safety and Health on health risk characterization. To assess

atmospheric deposition and characterize ecological effects, EPA works with the Department of Commerce's National Oceanic and Atmospheric Administration and the Department of the Interior's U.S. Fish and Wildlife Service.

The Agency has worked extensively with the Department of Health and Human Services (HHS) on the National Health and Nutritional Evaluation Study to identify mercury accumulations in humans. EPA also has worked with DOE on the 'Fate of Mercury' study to characterize mercury transport and traceability in Lake Superior.

To determine the extent to which agricultural activities contribute to air pollution, EPA will continue to work closely with the USDA through the joint USDA/EPA AAQTF. The AAQTF is a workgroup set up by Congress to oversee agricultural air quality-related issues and to develop cost-effective ways in which the agricultural community can improve air quality. In addition, the AAQTF coordinates research on agricultural air quality issues to avoid duplication and ensure data quality and sound interpretation of data.

In developing regional and international air quality programs and projects, EPA works primarily with the Department of State, the Agency for International Development, and the Department of Energy as well as with regional organizations. EPA's international air quality management program will complement EPA's programs on children's health, Trade and the Environment, and trans-boundary air pollution. In addition, EPA will partner with others worldwide, including international organizations such as the United Nations Environment Programme, the European Union, the OECD, the World Bank, the Asian Development Bank, and our colleagues in Canada, Mexico, Europe, and Japan. EPA works primarily with the Department of

State, the Agency for International Development, and the Department of Energy in developing international air quality programs and projects, and in working on regional agreements as well as with regional organizations.

Objective: Healthier Indoor Air

EPA works closely through a variety of mechanisms with a broad range of Federal, state, Tribal, and local government agencies, industry, non-profit organizations, and individuals, as well as other nations, to promote more effective approaches to identifying and solving indoor air quality problems. At the Federal level, EPA works closely with several departments or agencies:

Department of Health and Human Services (DHHS) to develop and conduction programs aimed at reducing children's exposure to known indoor triggers of asthma, including secondhand smoke;

- Department of Health and Human Services (DHHS) to develop and conduction programs aimed at reducing children's exposure to known indoor triggers of asthma, including secondhand smoke;
- Department of Housing and Urban Development (HUD) on home health and safety issues, especially those affecting children;
- Consumer Product Safety Commission (CPSC) to identify and mitigate the health hazards of consumer products designed for indoor use;
- Department of Education (DoEd) to encourage construction and operation of schools with good indoor air quality; and
- Department of Agriculture (USDA) to encourage USDA Extension Agents to conduct local projects designed to reduce risks from indoor air quality

EPA plays a leadership role on the President's Task Force on Environmental Health Risks and Safety Risks to Children, particularly with respect to asthma and school environmental health issues.

As Co-chair of the interagency Committee on Indoor Air Quality (CIAQ), EPA works with the CPSC, the Department of Energy, the National Institute for Occupational Safety and Health, and the Occupational Safety and Health Administration to review EPA draft publications, arrange the distribution of EPA publications, and coordinate the efforts of Federal agencies with those of state and local agencies concerned with indoor air issues.

Objective: Protect the Ozone Layer

In an effort to curb the illegal importation of ODSs, an interagency task force was formed consisting of representatives from EPA, the Departments of Justice, Homeland Security, State, and Commerce, and the Internal Revenue Service. Venting of illegally imported chemicals has the potential to prevent the United States from meeting the goals of the Montreal Protocol to restore the ozone layer.

EPA works very closely with the Department of State and other Federal agencies as appropriate in international negotiations among Parties to the Protocol. EPA works with the Office of the United States Trade Representative to analyze potential trade implications in stratospheric protection regulations that affect imports and exports.

EPA is working with USDA and the Department of State to facilitate research and development of alternatives to methyl bromide. EPA collaborates with these agencies to prepare U.S. requests for emergency and critical use exemptions of

methyl bromide. EPA is providing input to USDA on rulemakings for methyl bromide-related programs. EPA consults with the Food and Drug Administration (FDA) on the potential for domestic methyl bromide needs.

EPA also coordinates closely with FDA to ensure that sufficient supplies of CFCs are available for the production of life-saving metered-dose inhalers for the treatment of asthma and other lung diseases. This partnership between EPA and FDA combines the critical goals of protecting public health and limiting damage to the stratospheric ozone layer.

EPA works with the Centers for Disease Control and the National Weather Service to coordinate the Ultraviolet Radiation (UV) Index and the health messages that accompany index reports. EPA is a member of the Federal Council on Skin Cancer Prevention, which educates and protects all Federal employees from the risks of overexposure to UV radiation.

In addition to collecting its own UV data, EPA coordinates with the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration to monitor the state of the stratospheric ozone layer. EPA works with NASA on assessing essential uses and other exemptions for critical shuttle and rocket needs, as well as effects of direct emissions of high-speed aircraft flying in the stratosphere.

EPA coordinates with the Small Business Administration to ensure that proposed rules are developed in accordance with the Small Business Regulatory Flexibility Act.

Objective: Radiation

In addition to the specific activities described above, EPA continues to work with Federal agencies including NRC, DOE, and DHS to prevent metals and finished

products suspected of having radioactive contamination from entering the country. EPA also works with the Department of Transportation on initiatives to promote use of non-nuclear density gauges for highway paving, and with the DOE and NRC to develop state-of-the-art tracking systems for radioactive sources in U.S. commerce.

Objective: Reduce Greenhouse Gas Intensity

Voluntary climate protection programs government-wide stimulate the development and use of renewable energy technologies and energy efficient products that will help reduce greenhouse gas emissions. The effort is led by EPA and DOE with significant involvement from USDA, the Department of Housing and Urban Development (HUD) and the National Institute of Standards and Technology.

Agencies throughout the government make significant contributions to the climate protection programs. For example, DOE will pursue actions such as promoting the research, development, and deployment of advanced technologies (for example, renewable energy sources). The Treasury Department will administer proposed tax incentives for specific investments that will reduce emissions. EPA is working with DOE to demonstrate technologies that oxidize ventilation air methane from coal mines. EPA is broadening its public information transportation choices campaign as a joint effort with DOT. EPA coordinates with each of the above-mentioned agencies to ensure that our programs are complementary and in no way duplicative.

This coordination is evident in work recently completed by an interagency task force, including representatives from the Department of State, EPA, DOE, USDA, DOT, OMB, Department of Commerce, USGCRP, NOAA, NASA, and the Department of Defense, to prepare the Third

National Communication to the Secretariat as required under the FCCC. The FCCC was ratified by the United States Senate in 1992. A portion of the Third National Communication describes policies and measures (such as ENERGY STAR and EPA's Clean Automotive Technology initiative) undertaken by the U.S. to reduce greenhouse gas emissions, implementation status of the policies and measures, and their actual and projected benefits. One result of this interagency review process has been a refinement of future goals for these policies and measures which were communicated to the Secretariat of the FCCC in 2002. The "U.S. Climate Action Report 2002: Third National Communication of the United States of America under the United Nations Framework Convention on Climate Change" is available at:

<http://unfccc.int/resource/docs/natc/usnc3.pdf>

EPA works primarily with the Department of State, the Agency for International Development, and the Department of Energy as well as with regional organizations in implementing climate-related programs and projects. In addition, EPA partners with others worldwide, including international organizations such as the United Nations Environment Programme, the United Nations Development Programme, the International Energy Agency, the OECD, the World Bank, the Asian Development Bank, and our colleagues in Canada, Mexico, Europe and Japan.

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the World Bank, the Asian Development Bank, and our colleagues in Canada, Mexico, Europe, and Japan.

Objective: Enhance Science and Research

As noted, EPA works with the National Park Service in operating CASTNET. DOE will pursue actions such as promoting the research, development, and deployment of advanced technologies (for example, renewable energy sources). In the case of fuel cell vehicle technology, EPA is working closely with DOE as the Administration's FreedomCAR initiative develops, taking the lead on emissions-related issues.

The President's call for a greatly expanded and coordinated interagency PM research effort led to the creation, in 1999, of the Particulate Matter Workgroup, which is administered by the Air Quality Research Subcommittee of the Committee on Environment and Natural Resources (CENR). This workgroup, co-chaired by EPA and the National Institute of Environmental Health Sciences (NIEHS), has completed its *Strategic Research Plan for Particulate Matter*¹⁵ to guide the coordinated Federal research program over the next 5 to 10 years.

The body of national PM research dealing with atmospheric sciences is coordinated under NARSTO¹⁶. Its membership of more than 65 organizations includes all major Federal, state, and provincial governments; private industry; and utility sponsors of atmospheric sciences research in Canada, Mexico, and the U.S. NARSTO recently

¹⁵ Committee on Environment and Natural Resources, Air Quality Research Subcommittee (2002). *Strategic Research Plan for Particulate Matter*.

<www.al.noaa.gov/WWHWD/pubdocs/AQRS/reports/SRPPM.html>. Accessed 2004 Feb 3.

¹⁶ Formerly an acronym for "North American Research Strategy for Tropospheric Ozone," the term NARSTO is now simply a wordmark signifying a public-private partnership across the U.S., Canada, and Mexico for dealing with multiple features of tropospheric pollution, including ozone and suspended particulate matter.

released an assessment of PM atmospheric science, “Particulate Matter Science for Policy Makers: A NARSTO Assessment,”¹⁷ to assist policy makers as they implement their national air quality standards for PM. It presents the latest understanding of the PM atmospheric phenomena over North America, and recommends additional work to fill identified gaps.

EPA’s Air Toxics Research Program is coordinated as needed with other Federal agencies, such as the National Institute of Environmental Health Sciences (NIEHS) and the National Toxicology Program (as a source of toxicity testing data). The Health Effects Institute conducts complementary research related to air toxics that is coordinated with EPA activities. In addition, EPA conducts research on advanced source measurement approaches jointly with the Department of Defense through the Strategic Environmental Research and Development Program (SERDP).

Goal 2- Clean and Safe Water

Objective: Protect Human Health

The 1996 SDWA amendments include a provision that mandates joint EPA/Centers for Disease Control (CDC) study of waterborne diseases and occurrence studies in public water supplies. CDC is involved in assisting EPA in training health care providers (doctors, nurses, public health officials, etc.) on public health issues related to drinking water contamination and there is close CDC/EPA coordination on research on microbial contaminants in drinking water. EPA has in place a Memorandum of Understanding (MOU) and Interagency Agreement (IAG) with the CDC in the

Department of Health and Human Services (DHHS) to implement this provision.

In implementing its source water assessment and protection efforts, the Agency coordinates many of its activities with other Federal agencies. There are three major areas of relationships with other agencies concerning source water assessments and protection.

Public Water Systems (PWS)

Some Federal agencies, (i.e., USDA (Forest Service), DOD, Department of Energy, DOI (National Park Service), and USPS), own and operate public water systems. EPA’s coordination with these agencies focuses primarily on ensuring that they cooperate with the states in which their systems are located, and that they are accounted for in the states’ source water assessment programs as mandated in the 1996 amendments to the SDWA.

Data Availability, Outreach and Technical Assistance

EPA coordinates with USGS (US Geological Survey), USDA (Forest Service, Natural Resources Conservation Service, Cooperative State Research, Education, and Extension Service (CSREES), Rural Utilities Service); DOT, DOD, DOE, DOI (National Park Service and Bureaus of Indian Affairs, Land Management, and Reclamation); DHHS (Indian Health Service) and the Tennessee Valley Authority.

Tribal Access Coordination

EPA will continue to work with other federal agencies to develop a coordinated approach to improving tribal access to safe drinking water. In response to commitments made during the 2002 World Summit in Johannesburg, the EPA committed to the

¹⁷ NARSTO (2003). Particulate Matter Science for Policy Makers: A NARSTO Assessment. www.cgenv.com/narsto. Accessed 2004 Feb 3.

goal of coordinating with other federal agencies to reduce by half the number of households on tribal lands lacking access to safe drinking water by 2015. United Nations. 2002. *Report of the World Summit on Sustainable Development: Johannesburg, South Africa, 26 August – 4 September, 2002*. New York, NY: United Nations.

Collaboration with USGS

EPA and USGS have identified the need to engage in joint, collaborative field activities, research and testing, data exchange, and analyses, in areas such as the occurrence of unregulated contaminants, the environmental relationships affecting contaminant occurrence, evaluation of currently regulated contaminants, improved protection area delineation methods, laboratory methods, and test methods evaluation. EPA has an IAG with USGS to accomplish such activities. This collaborative effort has improved the quality of information to support risk management decision-making at all levels of government, generated valuable new data, and eliminated potential redundancies.

Collaboration with Public and Private Partners on Critical Water Infrastructure Protection

EPA coordinates with other federal agencies, especially the newly established Department of Homeland Security as well as the Centers for Disease Control and Prevention, the Food and Drug Administration, and the Department of Defense on biological, chemical, and radiological contaminants, and how to respond to their presence in drinking water and wastewater systems. A close linkage with the FBI, particularly with respect to ensuring the effectiveness of the ISAC, will be continued. The Agency is strengthening its working relationships with the American Water Works Association Research

Foundation, the Water Environment Research Federation and other research institutions to increase our knowledge on technologies to detect contaminants, monitoring protocols and techniques, and treatment effectiveness.

Collaboration with FDA

EPA and FDA have issued joint national fish consumption advisories to protect the public from exposure to mercury in commercially and recreationally caught fish, as well as fish caught for subsistence. EPA's advisory covers the recreational and subsistence fisheries in fresh waters where states and tribes have not assessed the waters for the need for an advisory.. *ibid.* <http://map1.epa.gov/html/federaladv> FDA's advisory covers commercially caught fish, and fish caught in marine waters.. *Ibid.* <http://map1.epa.gov/html/federaladv> EPA works closely with FDA to distribute the advisory to the public. In addition, EPA works with FDA to investigate the need for advisories for other contaminants and to ensure that these federal advisories support and augment advisories issued by states and tribes.

Beach Monitoring and Public Notification

The BEACH Act requires that all federal agencies with jurisdiction over coastal and Great Lakes recreation waters adjacent to beaches used by the public implement beach monitoring and public notification programs. These programs must be consistent with guidance published by EPA. *ibid.* "National Beach Guidance and Required Performance Criteria for Grants." EPA will continue to work with the U.S. Park Service and other federal agencies to ensure that their beach water quality monitoring and notification programs are technically sound and consistent with program performance criteria published by EPA.

Objective: Protect Water Quality***Watersheds***

Protecting and restoring watersheds will depend largely on the direct involvement of many Federal agencies and state, tribal and local governments who manage the multitude of programs necessary to address water quality on a watershed basis. Federal agency involvement will include USDA (Natural Resources Conservation Service, Forest Service, Agriculture Research Service), Department of the Interior (Bureau of Land Management, Office of Surface Mining, United States Geological Survey (USGS), Fish and Wildlife, and the Bureau of Indian Affairs), National Oceanographic and Atmospheric Administration (NOAA), Department of Transportation, and the Department of Defense (Navy, Army Corps of Engineers). At the state level, agencies involved in watershed management typically include departments of natural resources or the environment, public health agencies, and forestry and recreation agencies. Locally, numerous agencies are involved, including Regional planning entities such as councils of governments, as well as local departments of environment, health and recreation who frequently have strong interests in watershed projects.

National Pollutant Discharge Elimination System Program (NPDES)

Since inception of the NPDES program under Section 402 of the CWA, EPA and the authorized states have developed expanded relationships with various Federal agencies to implement pollution controls for point sources. EPA works closely with the Fish and Wildlife Service and the National Marine Fisheries Service on consultation for protection of endangered species through a Memorandum of Agreement. EPA works with the Advisory Council on Historic Preservation on National Historic Preservation Act implementation. EPA and

the states rely on monitoring data from the U.S. Geological Survey (USGS) to help confirm pollution control decisions. The Agency also works closely with the Small Business Administration and the Office of Management and Budget to ensure that regulatory programs are fair and reasonable. The Agency coordinates with the National Oceanic and Atmospheric Administration (NOAA) on efforts to ensure that NPDES programs support coastal and national estuary efforts; and with the Department of Interior on mining issues.

Joint Strategy for Animal Feeding Operations

The Agency is working closely with the USDA to implement the Unified National Strategy for Animal Feeding Operations finalized on March 9, 1999. The Strategy sets forth a framework of actions that USDA and EPA will take to minimize water quality and public health impacts from improperly managed animal wastes in a manner designed to preserve and enhance the long-term sustainability of livestock production. EPA's recent revisions to the CAFO Regulations (effluent guidelines and NPDES permit regulations) will be a key element of EPA and USDA's plan to address water pollution from CAFOs. EPA and USDA senior management meet routinely to ensure effective coordination across the two agencies.

Clean Water State Revolving Fund (CWSRF)

Representatives from EPA's SRF program, Housing and Urban Development's (HUD's) Community Development Block Grant program, and USDA's Rural Utility Service have signed a Memorandum of Understanding committing to assisting state or Federal implementers in: (1) coordination of the funding cycles of the three Federal agencies; (2) consolidation of plans of action (operating plans, intended

use plans, strategic plans, etc.); and (3) preparation of one environmental review document, when possible, to satisfy the requirements of all participating Federal agencies. A coordination group at the Federal level has been formed to further these efforts and maintain lines of communication. In many states, coordination committees have been established with representatives from the three programs.

In implementation of the Indian set-aside grant program under Title VI of the CWA, EPA works closely with the Indian Health Service to administer grant funds to the various Indian tribes, including determination of the priority ranking system for the various wastewater needs in Indian Country.

In 1998, EPA and the Rural Utilities Service of the USDA formalized a partnership between the two agencies to provide coordinated financial and technical assistance to tribes.

Construction Grants Program - US Army Corps of Engineers

Throughout the history of the construction grants program under Title II of the CWA, EPA and the delegated states have made broad use of the construction expertise of the Corps of Engineers to provide varied assistance in construction oversight and administrative matters. EPA works with the Corps to provide oversight for construction of the special projects that Congress has designated. The mechanism for this expertise has been and continues to be an Interagency Agreement between the two agencies.

Nonpoint Sources

EPA will continue to work closely with its Federal partners to achieve the ambitious strategic objective of reducing pollutant discharges, including at least 20 percent

from 1992 erosion levels. Most significantly, EPA will continue to work with the USDA, which has a key role in reducing sediment loadings through its continued implementation of the Environmental Quality Incentives Program, Conservation Reserve Program, and other conservation programs. USDA also plays a major role in reducing nutrient discharges through these same programs and through activities related to the AFO Strategy. EPA will also continue to work closely with the Forest Service and Bureau of Land Management, whose programs can contribute significantly to reduced pollutant loadings of sediment, especially on the vast public lands that comprise 29 percent of all land in the United States. EPA will work with these agencies, USGS, and the states to document improvements in land management and water quality. EPA will also work with other Federal agencies to advance a watershed approach to Federal land and resource management to help ensure that Federal land management agencies serve as a model for water quality stewardship in the prevention of water pollution and the restoration of degraded water resources. Implementation of a watershed approach will require coordination among Federal agencies at a watershed scale and collaboration with states, tribes and other interested stakeholders.

Vessel Discharges

Regarding vessel discharges, EPA will continue working closely with the Coast Guard on addressing ballast water discharges domestically, and with the interagency work group and U.S. delegation to Marine Environmental Protection Committee (MEPC) on international controls. EPA will continue to work closely with the Coast Guard, Alaska and other states, and the International Council of Cruise Lines regarding regulatory and non-

regulatory approaches to managing wastewater discharges from cruise ships. EPA will also continue to work with the Coast Guard regarding the vessel sewage discharge standards, and with the Navy on developing Uniform National Discharge Standards for Armed Forces vessels.

Regarding dredged material management, EPA will continue to work closely with the Corps of Engineers on standards for permit review, as well as site selection/designation and monitoring.

EPA's environmental mandate and expertise make it uniquely qualified to represent the Nation's environmental interests abroad. While the Department of State (DOS) is responsible for the conduct of overall U.S. foreign policy, implementation of particular programs, projects, and agreements is often the responsibility of other agencies with specific technical expertise and resources. Relations between EPA and DOS cut across several offices and/or bureaus in both organizations.

OIA also serves as the primary point-of-contact and liaison with the U.S. Agency for International Development (USAID). Specially drawing on expertise from throughout EPA, OIA administers a number of interagency agreements for environmental assistance.

Finally, EPA works closely with a number of other Federal agencies with environmental, health, or safety mandates. These include (among others) the Department of Labor, Department of Transportation, Department of Agriculture, Department of the Interior, Department of Health and Human Services, and the Food and Drug Administration.

EPA works with the Department of State, NOAA, Coast Guard, Navy, and other Federal agencies in developing the technical basis and policy decisions necessary for

negotiating global treaties concerning marine antifouling systems, invasive species, and air pollution from ships. EPA also works with the same Agencies in addressing land-based sources of marine pollution in the Gulf of Mexico and Wider Caribbean Basin.

Objective: Enhance Science and Research

While EPA is the Federal agency mandated to ensure safe drinking water, other Federal and non-Federal entities are conducting research that complements EPA's research program on priority contaminants in drinking water. For example, the Centers for Disease Control and Prevention (CDC) and the National Institute of Environmental Health Sciences (NIEHS) conduct health effects and exposure research. The Food and Drug Administration (FDA) also performs research on children's risks.

Many of these research activities are being conducted in collaboration with EPA scientists. The private sector, particularly the water treatment industry, is conducting research in such areas as analytical methods, treatment technologies, and the development and maintenance of water resources. Cooperative research efforts have been ongoing with the American Water Works Association Research Foundation and other stakeholders to coordinate drinking water research. EPA is also working with the U.S. Geological Survey (USGS) to evaluate performance of newly developed methods for measuring microbes in potential drinking water sources.

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EPA has developed joint research initiatives with the National Oceanic and Atmospheric Administration (NOAA) and the United States Geological Survey (USGS) for linking monitoring data and field study information with available toxicity data and assessment models for developing sediment criteria.

The issue of eutrophication, hypoxia, and harmful algal blooms (HABs) is a priority with the Committee on Environment and Natural Resources (CENR). An interagency research strategy for *Pfiesteria* and other harmful algal species was developed in 1998, and EPA is continuing to implement that strategy. EPA is working closely with NOAA on the issue of nutrients and risks posed by HABs. This CENR is also coordinating the research efforts among Federal agencies to assess the impacts of nutrients and hypoxia in the Gulf of Mexico. Urban wet weather flow research is being coordinated with other organizations such as the Water Environment Research Foundation's Wet Weather Advisory Panel, the ASCE Urban Water Resources Research Council, the U.S. Army Corps of Engineers

(USACE), and the U.S. Geological Survey (USGS). Research on the characterization and management of pollutants from agricultural operations (e.g., CAFOs) is being coordinated with the United States Department of Agriculture (USDA) through workshops and other discussions.

EPA is pursuing collaborative research projects with the USGS to utilize water quality data from urban areas obtained through the USGS National Ambient Water Quality Assessment (NAWQA) program, showing levels of pesticides that are even higher than in many agricultural area streams. These data have potential uses for identifying sources of urban pesticides, and EPA will evaluate how the USGS data could be integrated into the Geographic Information System (GIS) database system.

Goal 3-Land Preservation and Restoration

Objective: Preserve Land

Pollution prevention activities entail coordination with other Federal departments/agencies, such as the General Services Administration (use of safer products for indoor painting and cleaning), the Department of Defense (DOD) (use of safer paving materials for parking lots), and Defense Logistics Agency (safer solvents). The program also works with the National Institute of Standards and Technology, the International Standards Organization, and other groups to develop standards for Environmental Management Systems.

In addition to business, industry and other non-governmental organizations, EPA will work with Federal, state, Tribal, and local governments to encourage reduced generation as well as the safe recycling of wastes. Frequently, successful programs require multiple partners to address the multi-media nature of effective source reduction and recycling. The Agency has

brought together a range of stakeholders to examine alternatives in specific industrial sectors, and several regulatory changes have followed which encourage hazardous waste recycling. Partners in this effort include the Environmental Council of States, the Tribal Association on Solid Waste and Emergency Response, and the Association of State and Territorial Solid Waste Management Officials.

As Federal partners, EPA and the United States Postal Service (USPS) work together on several municipal solid waste projects. For instance, rather than dispose of returned or unwanted mail, EPA and the USPS developed and implemented successful recycling procedures and markets. For example, unwanted mail (advertisements, catalogues, etc.) is being returned to the Post Office for recycling rather than disposal by the recipient. In addition, Integrated Solid Waste Management Plans are being implemented at parks in western states because of Regional offices' assistance to the National Park Service. EPA also works with the Small Business Administration to provide support to recycling businesses.

The Federal government is the single largest potential source for "green" procurement in the country for office products as well as products for industrial use. EPA works with other Federal agencies and departments in advancing the purchase and use of recycled-content and other "green" products. In particular, the Agency is currently engaged with other organizations within the Executive Branch to foster compliance with Executive Order 13101 and in tracking and reporting purchases of products made with recycled contents.

In addition, the Agency is currently engaged with the DOD, Education and DOE, USPS, and other agencies to foster proper management of surplus electronics equipment, with a preference for reuse and recycling. With these agencies, and in

cooperation with the electronics industry, EPA participated in developing a draft interagency memorandum of understanding (MOU) which will lead to increased reuse and recycling of an array of computers and other electronics hardware used by civilian and military agencies. Implementation of this MOU will divert substantial quantities of plastic, glass, lead, mercury, silver, and other materials from disposal. Currently, EPA works with USDA and FDA on a variety of issues related to the disposal of agricultural products (food and/or animals), contaminated with chemical or biological pathogens.

Objective: Restore Land

Superfund Program

The Superfund Remedial program coordinates with many other Federal and state agencies in accomplishing its mission. Executive Order 12580 delegates certain authorities for implementing Superfund to other Federal agencies. Many of these agencies perform, in close consultation and coordination with EPA, the actual cleanup and essential services in areas where the Agency does not possess the specialized expertise. Currently, EPA has active interagency agreements with the National Oceanic and Atmospheric Administration (NOAA), the Department of Interior (DOI), the Occupational Safety and Health Administration (OSHA), the Federal Emergency Management Agency (FEMA), and the United States Coast Guard (USCG).

These agencies provide numerous Superfund related services such as providing technical support during hazardous waste site investigations and identifying and evaluating the severity of risks posed to natural resources from hazardous waste sites; providing scientific support for response operations in EPA's regional offices; supporting the national response system by providing emergency preparedness expertise

and administrative support to the national response team and the regional response teams; assisting in the coordination among Federal and state natural resource trustee agencies; conducting outreach to states, Indian Tribes and Federal natural resource trustee officials regarding natural resource damage assessments; conducting compliance assistance visits to review site safety and health plans and developing guidelines for assessing safety and health at hazardous waste sites; supporting the Superfund program in the management and coordination of training programs for local officials through the Emergency Management Institute and the National Fire Academy; and responding to actual or potential releases of hazardous substances involving the coastal zones, including the Great Lakes and designated inland river ports; and, litigating and settling cleanup agreements and cost recovery cases.

In addition, the Agency coordinates with the U. S. Army Corp of Engineers (USACE), states, and Tribes in the identification and cleanup of approximately 9,300 FUDS nationwide. Expectations are that the Agency will play an even greater role at these sites in the future.

USACE and the Bureau of Reclamation (BUREC) contribute to the cleanup of Superfund sites by providing technical support for the design and construction of many remediation projects through site-specific interagency agreements. These Federal partners have the technical design and construction expertise and contracting capability needed to assist EPA regions in implementing most of Superfund's high-cost fund-financed remedial action projects. These two agencies also provide technical on-site support to regions in the enforcement oversight of numerous construction projects performed by Potentially Responsible Parties.

The Superfund response and Federal

Facilities enforcement programs work closely with other Federal agencies (e.g., DOD, DOE, DOI, etc.) to clean up their facilities under the Superfund program. EPA also works with states and Indian tribes as key partners in the cleanup decision-making process at Superfund Federal sites.

The Agency also works in partnership with state and Tribal governments to strengthen their hazardous waste programs and improve the efficiency and effectiveness of the nation's overall hazardous waste response capability. EPA assists the states in developing their CERCLA implementation programs through infrastructure support, financial and technical assistance, and training. Partnerships with states increase the number of site cleanups, improve the timeliness of responses, and make land available for economic redevelopment sooner, while allowing for more direct local involvement in the cleanup process.

EPA partners with other Federal agencies, state and local governments, and private industry to fulfill Superfund program priorities when a site is radioactively contaminated. Under CERCLA, radioactively contaminated sites are addressed in a manner consistent with how chemically contaminated sites are addressed, accounting for the technical differences. The radiation program provides radiological scientific and technical expertise and leadership in evaluating projects and providing field and laboratory support.

Resource Conservation and Recovery Act

The Agency maintains a close relationship with the state agencies that are authorized to implement the Resource Conservation and Recovery Act (RCRA) Corrective Action program. EPA expects states to achieve the same level of Federal standards as the Agency, including annual performance goals of human exposures and groundwater releases controlled. As part of the state

grant process, Regional offices negotiate with the states their progress in meeting the corrective action environmental indicator goals.

Encouraging states to become authorized for the RCRA Corrective Action program remains a priority. Currently, thirty-nine states and territories have the authority to implement the program. EPA expects two additional states to gain authorization in the next year. EPA also encourages states to use alternate (non-RCRA) authorities to accomplish the goals of the Corrective Action program. These include state Superfund and voluntary programs.

The RCRA Corrective Action program also coordinates closely with other Federal agencies, primarily the DOD and DOE, which have many sites in the corrective action universe. Encouraging Federal facilities to meet environmental indicators remains a top priority.

Leaking Underground Storage Tanks

EPA, with very few exceptions, does not perform the cleanup of leaking underground storage tanks (LUST). States and territories use the LUST Trust Fund to administer their corrective action programs, oversee cleanups by responsible parties, undertake necessary enforcement actions, and pay for cleanups in cases where a responsible party cannot be found or is unwilling or unable to pay for a cleanup. More than 40 states have their own cleanup funds to pay for the majority of owners' and operators' cleanup costs. The vast majority of LUST cleanups are paid for by state LUST cleanup funds and not by private parties; state funds are separate from the Federal LUST Trust Fund.

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cleanups by responsible parties, undertake necessary enforcement actions, and pay for cleanups in cases where a responsible party cannot be found or is unwilling or unable to pay for a cleanup. Most states have cleanup funds that cover the majority of owners and operators' cleanup costs. These state funds are separate from the LUST Trust Fund.

State LUST programs are key to achieving the objectives and long-term strategic goals. Except in Indian Country, EPA relies on state agencies to implement the LUST program, including overseeing cleanups by responsible parties and responding to emergency LUST releases. LUST cooperative agreements awarded by EPA are directly given to the states to assist them in implementing their oversight and programmatic role.

Emergency Preparedness and Response

EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. This requires continuous coordination with many Federal, state and local agencies. As the Federal on-scene coordinator (OSC) in the inland zone, EPA evaluates and responds to thousands of releases annually as part of the National Response Plan (NRP). The NRP is a multi-agency preparedness and response mechanism that includes the following key components: the National Response Center (NRC); the National Response Team (NRT), composed of 16 Federal agencies; 13 Regional Response Teams (RRTs); and Federal OSCs. These organizations work with state and local officials to develop and maintain contingency plans that will enable the Nation to respond effectively to hazardous substance and oil emergencies.

EPA chairs the multi-agency National Response Team (NRT), and co-chairs Regional Response Teams (RRTs). In addition, the Agency plays a leadership role in crisis management, which requires

participation on a number of interagency committees and workgroups. Building on current efforts to enhance national emergency response management, EPA and its role on the NRT will continue implementation of the new National Incident Management System (NIMS) and National Response Plan (NRP).

The NRP, under the direction of the Department of Homeland Security (DHS), provides for the delivery of Federal assistance to states to help them deal with the consequences of terrorist events as well as natural and other significant disasters. EPA has the lead responsibility for the plan's Emergency Support Function covering hazardous materials and inland petroleum releases. Accordingly, EPA participates in the Federal Emergency Support Function Leaders Group which addresses NRP planning and implementation at the operational level. Through this interagency organization, Federal agencies handle issue formulation and resolution, review after-action reports, and evaluate the need for changes to NRP planning and implementation strategies. They also participate in NRP exercises, training and post event evaluation actions, coordinating these activities closely with the NRT.

EPA coordinates its preparedness activities with the Department of Homeland Security (DHS), Federal Emergency Management Administration (FEMA), Federal Bureau of Investigation (FBI), other Federal agencies, and state and local governments. EPA will also continue to clarify its roles and responsibilities to ensure that Agency security programs are consistent with the national homeland security strategy.

EPA provides staff support to the Homeland Security Operations Center (HSOC) during national disasters and emergencies, response to terrorist incidents and other responses under the NRP. EPA will also continue to develop and participate in training courses

on emergency support function responsibilities, deliver presentations on the NRP to national forums and participate in nationwide exercises to test and improve the Federal government's preparedness and response system and its capabilities.

Under the Oil Spill program, EPA works with other Federal agencies such as the United States Fish & Wildlife Service, National Oceanographic and Atmospheric Administration, United States Coast Guard (USCG), FEMA, Department of the Interior, Department of Transportation, Department of Energy, and other Federal agencies and states, as well as with local government authorities to develop Area Contingency Plans. The Department of Justice also provides assistance to agencies with judicial referrals when enforcement of violations becomes necessary. EPA and the USCG work in coordination with other Federal authorities to implement the National Preparedness for Response program.

USACE and the Bureau of Reclamation contribute to the cleanup of Superfund sites by providing technical support for the design and construction of many remediation projects through site-specific interagency agreements. These Federal partners have the technical design and construction expertise and contracting capability needed to assist EPA regions in implementing most of Superfund's high-cost Fund-financed remedial action projects. These two agencies also provide technical on-site support to regions in the enforcement oversight of numerous construction projects performed by PRPs.

The Superfund response and Federal Facilities enforcement programs work closely with other Federal agencies (e.g., DOD, DOE, DOI, etc.) to clean up their facilities under the Superfund program. EPA also works with states and Indian tribes as key partners in the cleanup decision-making process at Superfund Federal sites.

EPA expends substantial effort coordinating with other agencies, including work with the Department of Defense (DOD) in its Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program, the Department of Energy (DOE), and the Office of Health and Environmental Research. EPA also conducts collaborative field demonstrations (e.g., through the Superfund Innovative Technology Evaluation (SITE) program) and laboratory research with DOD, DOE, the Department of Interior (particularly the U.S. Geological Survey - USGS), and the National Aeronautics and Space Administration (NASA) to improve characterization and risk management options for dealing with subsurface contamination.

Other research efforts involving coordination include the unique controlled-spill field research facility that was designed in cooperation with the U.S. Bureau of Reclamation. Geophysical research experiments and development of software for subsurface characterization and detection of contaminants are being conducted with the USGS and DOE's Lawrence Berkeley National Laboratory. The USGS also has a number of programs, such as the Toxic Substances Hydrology Program, that support studies related to contamination of surface water and groundwater by hazardous materials.

The Agency is also working with the National Institute of Environmental Health Sciences (NIEHS), which manages a large basic research program focusing on Superfund issues, to advance fundamental Superfund research. The Agency for Toxic Substances and Disease Registry (ATSDR) also provides critical health-based information to assist EPA in making effective cleanup decisions. EPA works with these agencies on collaborative projects,

information exchange, and identification of research issues. Additionally, the Interstate Technology Regulatory Council (ITRC) has proven an effective forum for coordinating Federal and state activities and for defining continuing research needs through its teams on topics including contaminated sediments, permeable reactive barriers, radionuclides, and Brownfields. EPA developed a Memorandum of Understanding (MOU)¹⁸ with several other agencies (DOE, DOD, Nuclear Regulatory Commission, Department of the Interior - USGS, National Oceanic and Atmospheric Administration (NOAA), and the Department of Agriculture) for multimedia modeling research and development.

Goal 4-Healthy Communities and Ecosystems

Objective: Chemical, Organism and Pesticide Risks

Coordination with State lead agencies and with the U. S. Department of Agriculture (USDA) provides added impetus to the implementation of the Certification and Training program. States also provide essential activities in developing and implementing the Endangered Species and Worker Protection programs. States are involved in numerous special projects and investigations, including emergency response efforts. The Regions provide technical guidance and assistance to the States and Tribes in the implementation of all pesticide program activities.

EPA uses a range of outreach and coordination approaches for pesticide users, agencies implementing various pesticide programs and projects, and the general public. Outreach and coordination activities are essential to effective implementation of regulatory decisions, protection of workers

¹⁸ Interagency Steering Committee on Multimedia Environmental Models MOU, <http://www.iscmem.org/Memorandum.htm>

and endangered species, training of pesticide applicators, promotion of integrated pest management and environmental stewardship, and support for compliance through EPA's regional programs and those of the States and Tribes.

In addition to the training that EPA provides to farm workers and restricted use pesticide applicators, EPA works with the State Cooperative Extension Services designing and providing specialized training for various groups. Such training includes instructing private applicators on the proper use of personal protective equipment and application equipment calibration, handling spill and injury situations, farm family safety, preventing pesticide spray drift, and pesticide and container disposal. Other specialized training is provided to public works employees on grounds maintenance, to pesticide control operators on proper insect identification, and on weed control for agribusiness.

EPA coordinates with and uses information from a variety of Federal, State and international organizations and agencies in our efforts to protect the safety of America's health and environment from hazardous or higher risk pesticides. In May 1991, the United States Department of Agriculture (USDA) implemented the Pesticide Data Program (PDP) to collect objective and statistically reliable data on pesticide residues on food commodities. This action was in response to public concern about the effects of pesticides on human health and environmental quality. EPA uses PDP data to improve dietary risk assessment to support the registration of pesticides for minor crop uses. PDP is critical to implementing the Food Quality Protection Act. The system provides improved data collection of pesticide residues, standardized analytical and reporting methods, and sampling of foods most likely consumed by infants and children. PDP sampling,

residue, testing and data reporting are coordinated by the Agricultural Marketing Service using cooperative agreements with ten participating States representing all regions of the country. PDP serves as a showcase for Federal-State cooperation on pesticide and food safety issues.

FQPA requires EPA to consult with other government agencies on major decisions. EPA, USDA and FDA work closely together using both a Memoranda of Understanding and working committees to deal with a variety of issues that affect the involved agencies' missions. For example, these agencies work together on residue testing programs and on enforcement actions that involve pesticide residues on food, and we coordinate our review of antimicrobial pesticides. The Agency coordinates with USDA/ARS in promotion and communication of resistance management strategies. Additionally, we participate actively in the Federal Interagency Committee on Invasive Animals and Pathogens (ITAP) which includes members from USDA, USDOL, DOD, DHS and CDC to coordinate planning and technical advice among Federal entities involved in invasive species research, control and management.

While EPA is responsible for making registration and tolerance decisions, the Agency relies on others to carry out some of the enforcement activities. Registration-related requirements under FIFRA are enforced by the States. The Department of Health and Human Services/Food and Drug Administration enforces tolerances for most foods and the United States Department of Agriculture/Food Safety and Inspection Service enforces tolerances for meat, poultry and some egg products.

Internationally, the Agency collaborates with the Intergovernmental Forum on Chemical Safety (IFCS), the CODEX Alimentarius Commission, the North American Commission on Environmental

Cooperation (NACEC), the Organization for Economic Cooperation and Development (OECD) and the North American Free Trade Agreement (NAFTA) Commission. These activities serve to coordinate policies, harmonize guidelines, share information, correct deficiencies, build other nations' capacity to reduce risk, develop strategies to deal with potentially harmful pesticides and develop greater confidence in the safety of the food supply.

One of the Agency's most valuable partners on pesticide issues is the Pesticide Program Dialogue Committee (PPDC), which brings together a broad cross-section of knowledgeable individuals from organizations representing divergent views to discuss pesticide regulatory, policy and implementation issues. The PPDC consists of members from industry/trade associations, pesticide user and commodity groups, consumer and environmental/public interest groups and others.

The PPDC provides a structured environment for meaningful information exchanges and consensus building discussions, keeping the public involved in decisions that affect them. Dialogue with outside groups is essential if the Agency is to remain responsive to the needs of the affected public, growers and industry organizations.

EPA relies on data from HHS to help assess the risk of pesticides to children. Other collaborative efforts that go beyond our reliance on the data they collect include developing and validating methods to analyze domestic and imported food samples for organophosphates, carcinogens, neurotoxins and other chemicals of concern. These joint efforts protect Americans from unhealthful pesticide residue levels.

EPA's chemical testing data provides information for the Occupational Safety and Health Administration's (OSHA) worker

protection programs, the National Institute for Occupational Safety and Health (NIOSH) for research, and the Consumer Product Safety Commission (CPSC) for informing consumers about products through labeling. EPA frequently consults with these Agencies on project design, progress and the results of chemical testing projects.

The Agency works with a full range of stakeholders on homeland security issues: USDA, CDC, other federal agencies, industry and the scientific community. Review of the agents that may be effective against anthrax has involved GSA, State Department, UAMRIID, FDA, EOSA, USPS, and others, and this effort will build on this network.

The Acute Exposure Guidelines (AEG) program is a collaborative effort that includes ten Federal agencies (EPA, DHS, DOE, DOD, DOT, NIOSH, OSHA, CDC, ATSDR, and FDA), numerous State agencies, private industry, academia, emergency medical associations, unions, and other organizations in the private sector. The program also has been supported internationally by the OECD and includes active participation by the Netherlands, Germany and France.

The success of EPA's lead program is due in part to effective coordination with other Federal agencies, States and Indian Tribes through the President's Task Force on Environmental Health Risks and Safety Risks to Children. EPA will continue to coordinate with HUD to clarify how new rules may affect existing EPA and HUD regulatory programs, and with the Federal Highway Administration of the Department of Transportation and the Occupational Safety and Health Administration (OSHA) of the Department of Labor on worker protection issues. EPA will continue to work closely with State and Federally recognized Tribes to ensure that authorized

State and Tribal programs continue to comply with requirements established under TSCA, that the ongoing Federal accreditation certification and training program for lead professionals is administered effectively, and that the States and Tribes adopt the Renovation and Remodeling and the Buildings and Structures Rules when these rules become effective.

EPA has a Memorandum of Understanding (MOU) with HUD on coordination of efforts on lead-based paint issues. As a result of the MOU, EPA and HUD have co-chaired the President's Task Force since 1997. There are 14 other Federal agencies including CDC and the Department of Defense (DOD) on the Task Force. HUD and EPA also maintain the National Lead Information Center and share enforcement of the Disclosure Rule.

Mitigation of existing risk is a common interest for other Federal agencies addressing issues of asbestos and PCBs. EPA will continue to coordinate interagency strategies for assessing and managing potential risks from asbestos and other fibers. Coordination on safe PCB disposal is an area of ongoing emphasis with the Department of Defense (DOD), and particularly with the U.S. Navy, which has special concerns regarding PCBs encountered during ship scrapping. PCBs and mercury storage and safe disposal are also important issues requiring coordination with the Department of Energy and DOD as they develop alternatives and explore better technologies for storing and disposing high risk chemicals.

To effectively participate in the international agreements on POPs, heavy metals and PIC substances, EPA must continue to coordinate with other Federal agencies and external stakeholders, such as Congressional staff, industry, and environmental groups. For example, EPA has an interest in

ensuring that the listing of chemicals, including the application of criteria and processes for evaluating future chemicals for possible international controls, is based on sound science. Similarly, the Agency typically coordinates with the Food and Drug Administration (FDA), FDA's National Toxicology Program, the Centers for Disease Control/Agency for Toxic Substances and Disease Registry (CDC/ATSDR), the National Institute of Environmental Health Sciences (NIEHS) and/or the Consumer Product Safety Commission (CPSC) on matters relating to OECD test guideline harmonization.

EPA's objective is to promote improved health and environmental protection, both domestically and worldwide. The success of this objective is dependent on successful coordination not only with other countries, but also with various international organizations such as the Intergovernmental Forum on Chemical Safety (IFCS), the North American Commission on Environmental Cooperation (NACEC), the Organization for Economic Cooperation and Development (OECD), the United Nations Environment Program (UNEP) and the CODEX Alimentarius Commission. The North American Free Trade Agreement and cooperation with Canada and Mexico play an integral part in the harmonization of data requirements.

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EPA is a leader in global discussions on

mercury through the United Nations Environment Program (UNEP). EPA was instrumental in the launch of UNEP's Global Mercury Program, and we will continue to work with developing countries and with other developed countries in the context of that program. In addition, we have developed a strong network of domestic partners interested in working on this issue, including the Department of Energy and the United States Geological Survey.

EPA has developed cooperative efforts on POPs with key international organizations and bodies, such as the United Nations Food and Agricultural Organization, the United Nations Environment Program, the Arctic Council, and the World Bank. EPA is partnering with domestic and international industry groups and foreign governments to develop successful programs.

Objective: Communities

The Governments of Mexico and the United States agreed, in November 1993, to assist communities on both sides of the border in coordinating and carrying out environmental infrastructure projects. The agreement between Mexico and the United States furthers the goals of the North American Free Trade Agreement and the North American Agreement on Environmental Cooperation. To this purpose, the governments established two international institutions, the Border Environmental Cooperation Commission (BECC) and the North American Development Bank (NADBank), which manages the Border Environmental Infrastructure Fund (BEIF), to support the financing and construction of much need environmental infrastructure.

The BECC, with headquarters in Ciudad Juarez, Chihuahua, Mexico, assists local communities and other sponsors in developing and implementing environmental infrastructure projects. The BECC also

certifies projects as eligible for NADBank financing. The NADBank, with headquarters in San Antonio, Texas, is capitalized in equal shares by the United States and Mexico. NADBank provides new financing to supplement existing sources of funds and foster the expanded participation of private capital.

A significant number of residents along the U.S.-Mexico border area are without basic services such as potable water and wastewater treatment and the problem has become progressively worse in the last few decades. Over the last several years, EPA has continued to work with the U.S. and Mexican Sections of the International Boundary and Water Commission to further efforts to improve water and wastewater services to communities within 100 km of the U.S.-Mexico border. Recently, EPA has been involved in efforts to plan, design and construct more than 10 water and wastewater facilities in the border region.

EPA's environmental mandate and expertise make it uniquely qualified to represent the nation's environmental interests abroad. While the Department of State (DOS) is responsible for the conduct of overall U.S. foreign policy, implementation of particular programs, projects, and agreements is often the responsibility of other agencies with specific technical expertise and resources. Relations between EPA and DOS cut across several offices and/or bureaus in both organizations.

EPA works extensively with the Office of the U.S. Trade Representative (USTR), as well as the USTR-chaired interagency Trade Policy Staff Committee (TPSC) system, to ensure that U.S. trade and environmental policies are mutually supportive. (The TPSC system consists of various interagency workgroups that develop trade policy for political level review and decision.) For example, through the Agency's participation in the negotiation of both regional and

bilateral trade agreements and the World Trade Organization Agreements, EPA works with USTR to ensure that U.S. obligations under international trade agreements do not hamper the ability of Federal and state governments to maintain high levels of domestic environmental protection.

The two agencies also work together to ensure that new obligations are consistent with U.S. law and EPA's rules, regulations, and programs. In addition to the work with USTR, EPA also cooperates with many other Federal agencies in the development and execution of U.S. trade policy, and in performing environmental reviews of trade agreements, developing and implementing environmental cooperation agreements associated with each new FTA, and developing and implementing the associated environmental capacity building projects. EPA works most closely with the Department of State, USAID and USTR in the capacity building area. Finally, the Agency also serves as the co-lead (with USTR) of the Trade and Environment Policy Advisory Committee (TEPAC), a formally-constituted advisory body made up of respected experts from industry, NGOs and academia.

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Objective: Ecosystems

National Estuary Program

Effectively implementing successful comprehensive management plans for the estuaries in the NEP depends on the cooperation, involvement, and commitment of Federal and state agency partners that have some role in protecting and/or managing those estuaries. Common Federal partners include NOAA, the United States Fish and Wildlife Service (USFWS), the Army Corps of Engineers, and USDA. Other partners include State and local government agencies, universities, industry, non-governmental organizations (NGOs), and members of the public.

Wetlands

Federal agencies share the goal of increasing wetlands functions and values, and implementing a fair and flexible approach to wetlands regulations. In addition, EPA has committed to working with ACOE to ensure that the Clean Water Act Section 404 program is more open, consistent, predictable, and based on sound science.

Coastal America

In efforts to better leverage our collaborative authorities to address coastal communities' environmental issues (e.g., coastal habitat losses, nonpoint source pollution, endangered species, invasive species, etc.), EPA, by memorandum of agreement in 2002 Multi-agency signatories. November 2002. *Coastal America 2002 Memorandum of Understanding*. Available online at <http://www.coastalamerica.gov/text/mou02.htm>

Great Lakes

Pursuant to the mandate in Section 118 of the Clean Water Act to "coordinate action of the Agency with the actions of other Federal agencies and state and local authorities..." Great Lakes National Program Office (GLNPO) is engaged in extensive coordination efforts with state, Tribal, and other Federal agencies, as well as with our counterparts in Canada. EPA and its local, state, tribal and federal partners are coordinating restoration of the Great Lakes pursuant to a Great Lakes Regional Collaboration. EPA previously joined with states, Tribes, and Federal agencies that have stewardship responsibilities for the Lakes in developing the new Great Lakes Strategy. In addition to the eight Great Lakes States and interested Tribes, partners include the Army Corps of Engineers (Corps), the Coast Guard, the Fish and Wildlife Service (USFWS), the U.S. Office

of Geological Survey, the National Oceanic and Atmospheric Administration (NOAA), and the Natural Resources Conservation Service (NRCS). The Strategy joins environmental protection agencies with natural resource agencies in pursuit of common goals. These organizations meet semi-annually as the Great Lakes U.S. Policy Committee to strategically plan and prioritize environmental actions. GLNPO monitoring involves extensive coordination among these partners, both in terms of implementing the monitoring program, and in utilizing results from the monitoring to manage environmental programs. GLNPO's sediments program works closely with the states and the Corps regarding dredging issues. Implementation of the Binational Toxics Strategy involves extensive coordination with Great Lakes States. GLNPO works closely with states, tribes, FWS, and NRCS in addressing habitat issues in the Great Lakes. EPA also coordinates with these partners regarding development and implementation of Lakewide Management Plans for each of the Great Lakes and for Remedial Action Plans for the 31 U.S./binational Areas of Concern.

Chesapeake Bay

The Chesapeake Bay Program has a Federal Agencies Committee, chaired by EPA, which was formed in 1984 and has met regularly ever since. There are currently over 20 different Federal agencies actively involved with the Bay Program through the Federal Agencies Committee. The Federal agencies have worked together over the past decade to implement the commitments laid out in the 1994 *Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay* and the 1998 *Federal Agencies Chesapeake Ecosystem Unified Plan (FACEUP)*. The Federal Agencies Committee has been focusing on how its members can help to achieve the 104 commitments contained in the *Chesapeake*

2000 agreement adopted by the Chesapeake Bay Program in June 2000. Through this interagency partnership Federal agencies have contributed to some major successes, such as the U.S. Forest Service helping to meet the year 2010 goal to restore 2,010 miles of riparian forest buffers eight years early; the National Park Service leading the effort to establish over 500 miles of water trails three years early; and the U.S. Fish and Wildlife Service in reaching the Program's fish passage goal of reopening 1,357 miles of formerly blocked river habitat in 2004. Also in 2004, through the Federal Agencies Committee, the members sought better coordination of agency budgets and other programs to try to leverage maximum benefit to the state, private, and federal efforts protect and restore the Bay.

Gulf of Mexico

Key to the continued progress of the Gulf of Mexico Program is a broad multi-organizational Gulf states-led partnership comprised of regional; business and industry; agriculture; State and local government; citizens; environmental and fishery interests; and, numerous Federal departments and agencies. This Gulf partnership is comprised of members of the Gulf Program's Policy Review Board, subcommittees, and workgroups. Established in 1988, the Gulf of Mexico Program is designed to assist the Gulf states and stakeholders in developing a regional, ecosystem-based framework for restoring and protecting the Gulf of Mexico through coordinated Gulf-wide as well as priority area-specific efforts. The Gulf states strategically identify the key environmental issues and work at the regional, state, and local level to define, recommend, and voluntarily implement the supporting solutions. To achieve the Program's environmental objectives, the partnership must target specific Federal, state, local, and private programs, processes, and financial

authorities in order to leverage the resources needed to support state and community actions.

Objective: Enhance Science and Research

Several Federal agencies sponsor research on variability and susceptibility in risks from exposure to environmental contaminants. EPA collaborates with a number of the Institutes within the National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC). For example, the National Institute of Environmental Health Sciences (NIEHS) conducts multi-disciplinary biomedical research programs, prevention and intervention efforts, and communication strategies. The NIEHS program includes an effort to study the effects of chemicals, including pesticides and other toxics, on children. EPA collaborates with NIEHS in supporting the Centers for Children's Environmental Health and Disease Prevention, which study whether and how environmental factors play a role in children's health.

Other coordination and collaborations include the development of a joint research initiative with the National Institute for Child Health and Human Development (NICHD) and the Centers for Disease Control and Prevention to conduct research and risk assessment for the National Children's Study.

Research in ecosystems protection is coordinated government-wide through the Committee on Environment and Natural Resources (CENR). EPA is an active participant in the CENR, and all work in this objective is fully consistent and complementary with other Committee member activities. EPA researchers work within the CENR on the Environmental Monitoring and Assessment Program (EMAP) and other ecosystems protection

research including the restoration of habitats and species, impacts of landscape change, invasive species and inventory and monitoring programs.

The Mid-Atlantic Landscape Atlas represents one of the EMAP's first regional-scale ecological assessments, and was developed in cooperation with National Oceanic and Atmospheric Administration (NOAA), US Fish and Wildlife Service (USFWS), the University of Tennessee, and the U.S. Department of Energy's (DOE's) Oak Ridge National Laboratory. Development of the Networking and Information Technology Research & Development (NITR) Modeling System is coordinated with the Army Corps of Engineers (USACE), Department of Agriculture, and DOE. Through interagency agreements with the U.S. Geological Survey (USGS), EPA has worked to investigate and develop tools for assessing the impact of hydrogeology on riparian restoration efforts. The collaborative work with the USGS continues to play a vital role in investigating the impact and fate of atmospheric loadings of nitrogen and nitrogen applications as part of restoration technologies on terrestrial and aquatic ecosystems. All of these efforts have significant implications for risk management in watersheds, total maximum daily load (TMDL) implementation, and management of non-point source pollutants.

The Agency, through partnerships with private sector companies, non-profits, other Federal agencies, universities, and states, including California EPA, has worked to identify and control human exposure to methyl-mercury. EPA has also been working with the Department of Energy and the U.S. Geological Survey to address risk management issues associated with mercury emissions from utilities.

EPA's Global Change Research Program is coordinated with the Committee on Climate

Change Science and Technology Integration (CCCSTI). Through its participation in the Climate Change Science Program (CCSP), the Agency collaborates closely with other CCSP member agencies (*e.g.*, NOAA, DOE, NASA, and NSF), to ensure appropriate prioritization and efficiency, to avoid duplication, and to ensure consistently high standards of scientific review for all aspects of supported studies and analyses.

Because the challenges of the computational toxicology (CT) program are so large, EPA is working with a number of external partners in CT research. Discussions and collaborative activities are underway with the following organizations: 1) The Joint Genome Institute (expertise in genome sequencing and functional genomics); 2) the Pacific Northwest National Laboratory – a leader in the development of metabonomics (DOE); 3) the Sandia National Laboratories – leader in the field of bioinformatics (DOE); and 4) the National Institute of Environmental Health Sciences. Taken together, these collaborations constitute a significant, critical new partnership between EPA and external entities. These partnerships are designed to allow EPA to leverage its core intramural research program with the scientific expertise of other agencies.

The broad nature of the EDCs issue necessitates a coordinated effort on both the national and international levels. EPA has shown extensive leadership at both levels - chairing the Committee on Environment and Natural Resources (CENR) interagency working group and chairing a Steering Group on Endocrine Disruptors under the auspices of the International Programme on Chemical Safety/World Health Organization/Organization for Economic Cooperation and Development (IPCS/WHO/OECD). Due to the complex nature of the uncertainties posed by endocrine disrupting chemicals, the

overlapping concerns of Federal agencies, and the resource constraints on the Federal budget, close coordination and cooperation among Federal agencies are essential to the resolution of critical research questions. While the CENR provides the umbrella for this coordination, individual agencies are responsible for the development of their own independent research plans.

Homeland Security research is conducted in collaboration with numerous agencies, enabling funding to be leveraged across multiple programs and producing synergistic results. EPA's National Homeland Security Research Center (NHSRC) works closely with the Department of Homeland Security (DHS) to assure that EPA's efforts are directly supportive of DHS priorities. Utilizing experience gained from the management of ORD's STAR program, EPA is also working with DHS to provide support and guidance to DHS in the startup of their University Centers of Excellence program. Recognizing that the Department of Defense has significant expertise and facilities related to biological and chemical warfare agents, the NHSRC works closely with the Edgewood Chemical and Biological Center (ECBC), the Technical Support Working Group, the Army Corps of Engineers, and other Department of Defense organizations. In conducting biological agent research, the NHSRC is also collaborating with the Centers for Disease Control and Prevention (CDC). The NHSRC works with the Department of Energy (DOE) to access research conducted by DOE's National Laboratories, as well as to obtain data related to radioactive materials.

In addition to these major collaborations, the NHSRC has relationships with numerous other Federal agencies, including the U.S. Air Force, U.S. Navy, the Food and Drug Administration, the U.S. Geological Survey, and the National Institute of Standards and Technology. Also, the NHSRC is working

with state and local emergency response personnel to understand better their needs and build relationships, which will enable the quick deployment of NHSRC products. In the water infrastructure arena, the NHSRC is providing information to the Water Information Sharing and Analysis Center (WaterISAC) operated by the Association of Metropolitan Water Agencies (AMWA).

Goal 5-Compliance and Environmental Stewardship

Objective: Improve Compliance

The Enforcement and Compliance Assurance Program coordinates closely with the Department of Justice (DOJ) on all enforcement matters. In addition, the program coordinates with other agencies on specific environmental issues as described herein.

The Office of Enforcement and Compliance Assurance coordinates with the Chemical Safety and Accident Investigation Board, the Occupational Safety and Health Administration, and Agency for Toxic Substances and Disease Registry in preventing and responding to accidental releases and endangerment situations, with the Bureau of Indian Affairs on tribal issues relative to compliance with environmental laws on Tribal Lands, and with the Small Business Administration on the implementation of the Small Business Regulatory Enforcement Fairness Act (SBREFA). OECA also shares information with the Internal Revenue Service (IRS) on cases which require defendants to pay civil penalties, thereby assisting the IRS in assuring compliance with tax laws. In addition, it coordinates with the Small Business Administration and a number of other federal agencies in implementing the Business Compliance One-Stop Project, an "E-Government" project that is part of the

President's Regulatory Management Agenda. The Office of Enforcement and Compliance Assurance also works with a variety of federal agencies including the Department of Labor and the Internal Revenue Service to organize a Federal Compliance Assistance Roundtable to address cross cutting compliance assistance issues. Coordination also occurs with the U.S. Army Corps of Engineers on wetlands.

Due to changes in the Food Security Act, the U.S. Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS) has a major role in determining whether areas on agricultural lands meet the definition of wetlands and are therefore regulated under the Clean Water Act. Civil Enforcement coordinates with USDA/NRCS on these issues also. The program coordinates closely with the Department of Agriculture on the implementation of the Unified National Strategy for Animal Feedlot Operations.

EPA's Enforcement and Compliance Assurance program also coordinates with USDA on food safety issues arising from the misuse of pesticides, and shares joint jurisdiction with Federal Trade Commission (FTC) on pesticide labeling and advertising. Coordination also occurs with Customs on pesticide imports. EPA and the Food and Drug Administration (FDA) share jurisdiction over general-purpose disinfectants used on non-critical surfaces and some dental and medical equipment surfaces (e.g., wheelchairs). The Agency has entered into a Memorandum of Understanding with the Department of Housing and Urban Development concerning lead poisoning.

The Criminal Enforcement program coordinates with other federal law enforcement agencies (i.e. FBI, Customs, U.S. Department of Labor, U.S. Treasury, U.S. Coast Guard, DOJ) and with state and

local law enforcement organizations in the investigation and prosecution of environmental crimes. EPA also actively works with DOJ to establish task forces that bring together federal, state and local law enforcement organizations to address environmental crimes. In addition, the National Enforcement Training Institute has an Interagency Agreement with the Department of Treasury to provide specialized criminal environmental training to federal, state, local, and tribal law enforcement personnel at the Federal Law Enforcement Training Center (FLETC) in Glynco, GA.

Under Executive Order 12088, EPA is directed to provide technical assistance to other Federal agencies to help ensure their compliance with all environmental laws. The Federal Facility Enforcement Program coordinates with other Federal agencies, states, local, and tribal governments to ensure compliance by federal agencies with all environmental laws.

The Office of Enforcement and Compliance Assurance collaborates with the states and tribes. States perform the vast majority of inspections, direct compliance assistance, and enforcement actions. Most EPA statutes envision a partnership between EPA and the states under which EPA develops national standards and policies and the states implement the program under authority delegated by EPA. If a state does not seek approval of a program, EPA must implement that program in the state. Historically, the level of state approvals has increased as programs mature and state capacity expands, with many of the key environmental programs approaching approval in nearly all states. EPA will increase its effort to coordinate with states on training, compliance assistance, capacity building and enforcement. EPA will continue to enhance the network of state and tribal compliance assistance providers.

EPA works directly with Canada and Mexico bilaterally and in the trilateral Commission for Environmental Cooperation (CEC). EPA's border activities require close coordination with the Bureau of Customs and Border Protection, the Fish and Wildlife Service, the Department of Justice, and the States of Arizona, California, New Mexico, and Texas.

Objective: Build Tribal Capacity

EPA is involved in a broad range of pollution prevention (P2) activities which can yield reductions in waste generation and energy consumption in both the public and private sectors. For example, the EPP initiative, which implements Executive Orders 12873 and 13101, promotes the use of cleaner products by Federal agencies. This is aimed at stimulating demand for the development of such products by industry.

This effort includes a number of demonstration projects with other Federal Departments and Agencies, such as the National Park Service (to use Green Purchasing as a tool to achieve the sustainability goals of the parks), Department of Defense (use of environmentally preferable construction materials), and Defense Logistics Agency (identification of environmental attributes for products in its purchasing system). The program is also working within EPA to "green" its own operations. The program also works with the National Institute for Standards and Technology to develop a life-cycle based decision support tool for purchasers.

Under the Suppliers' Partnership for the Environment program and its umbrella program, the GSN, EPA's P2 Program is working closely with the National Institute of Standards and Technology and its Manufacturing Extension Partnership Program to provide technical assistance to

the process of "greening" industry supply chains. The EPA is also working with the Department of Energy's Industrial Technologies Program to provide energy audits and technical assistance to these supply chains.

The Agency is required to review environmental impact statements and other major actions impacting the environment and public health proposed by all federal agencies, and make recommendations to the proposing federal agency on how to remedy/mitigate those impacts. Although EPA is required under § 309 of the Clean Air Act (CAA) to review and comment on proposed federal actions, neither the National Environmental Policy Act nor § 309 CAA require a federal agency to modify its proposal to accommodate EPA's concerns. EPA does have authority under these statutes to refer major disagreements with other federal agencies to the Council on Environmental Quality. Accordingly, many of the beneficial environmental changes or mitigation that EPA recommends must be negotiated with the other federal agency. The majority of the actions EPA reviews are proposed by the Forest Service, Department of Transportation (including Federal Highway Administration and Federal Aviation Administration), Army Corps of Engineers, Department of the Interior (including Bureau of Land Management, Minerals Management Service and National Park Service), Department of Energy (including Federal Regulatory Commission), and Department of Defense

EPA and the Department of Interior are coordinating an Interagency Tribal Information Steering Committee that includes the Bureau of Reclamation, Department of Energy, Department of Housing and Urban Development, U.S. Geological Survey, Federal Geographic Data Committee, Bureau of Indian Affairs, Indian Health Service, Department of the

Treasury, and Department of Justice. This Interagency effort is aimed to coordinate the exchange of selected sets of environmental, resource, and programmatic information pertaining to Indian Country among Federal agencies in a “dynamic” information management system that is continuously and automatically updated and refreshed, to be shared equally among partners and other constituents.

Under a two-party interagency agreement, EPA works extensively with the Indian Health Service to cooperatively address the drinking water and wastewater infrastructure needs of Indian tribes. EPA is developing protocols with the Indian Health Service Sanitation Facilities Construction Program for integration of databases of the two agencies, within the framework of the Tribal Enterprise Architecture.

EPA has organized a Tribal Data Working Group under the Federal Geographic Data Committee, and, along with BIA, is the co-chair of this group. EPA will play a lead role in establishing common geographic data and metadata standards for Tribal data, and in establishing protocols for exchange of information among Federal, non-Federal and Tribal cooperating partners.

EPA is developing protocols with the Bureau of Reclamation, Native American Program, for integration of databases of the two agencies, within the framework of the Tribal Enterprise Architecture. EPA is also developing agreements to share information with the Alaska District, U.S. Army Corps of Engineers.

Objective: Enhance Science and Research

The forensic program works with the state, local and tribal agencies, providing technical

assistance, and on-site investigation and inspection activities in support of the Agency’s civil program. The program also coordinates with the Department of Justice and other federal, state and local law enforcement organizations in support of criminal investigations.

As part of its pollution prevention research, EPA joined with USDA, DOC, DOD, DOE, NASA, NIH’s National Institute of General Medical Sciences (NIGMS), and NSF on a metabolic engineering research solicitation. EPA is also coordinating with DOD’s Strategic Environmental Research and Development Program (SERDP) in an ongoing partnership, especially in the areas of pollution prevention research and incorporation of materials lifecycle analysis into the manufacturing process for weapons and military equipment. The agency has also made contact with USDA regarding lifecycle analysis of biologically- and genetically-altered products. EPA and the Army Corps of Engineers will address the costs and benefits associated with new engineering projects and technologies in order to respond to the economic impacts of environmental innovation.

EPA co-funds performance evaluation of ballast water treatment technologies and mercury continuous emission monitors through memoranda of agreement with the Coast Guard and the State of Massachusetts. The agency also coordinates technology verifications with NOAA (multiparameter water quality probes); DOE (mercury continuous emission monitors); DOD (explosives monitors, PCB detectors, dust suppressants); USDA (ambient ammonia monitors); Alaska and Pennsylvania (arsenic removal); Georgia, Kentucky, and Michigan (storm water treatment); and Colorado and New York (waste-to-energy technologies).

COORDINATION WITH OTHER AGENCIES

ENABLING SUPPORT PROGRAMS

Office of the Chief Financial Officer (OCFO)

EPA will develop and issue guidance for executive agencies to use when purchasing goods and services in response to Executive Order 13101 to show a preference for "environmentally preferable" products and services.

To achieve its mission, OCFO has undertaken specific coordination efforts with Federal and state agencies and departments through two separate vehicles: 1) the National Academy of Public Administration's Consortium on Improving Government Performance; 2) active contributions to standing interagency management committees, including the Chief Financial Officers Council and the Federal Financial Managers' Council. These groups are focused on improving resources management and accountability throughout the Federal government. OCFO also coordinates appropriately with Congress and other Federal agencies, such as Department of Treasury, Office of Management of Budget, and the General Accounting Office.

Office of Environmental Information (OEI)

EPA works with its state partners under the State/EPA Information Management Workgroup and the Network Steering Board. This workgroup has created action teams to jointly develop key information projects. Action teams consist of EPA, state, and Tribal members. They are structured to result in consensus solutions to information management issues which affect states, tribes, and EPA, such as the

development and use of environmental data standards, and implementation of new technologies for collecting and reporting information.

EPA also participates in multiple workgroups with other Federal agencies including the United States Geological Survey (USGS), Federal Geographic Data Committee (FGDC), and CIO Council (<http://www.cio.gov/>). The Agency is actively involved with several agencies in developing government-wide e-government reforms, and continues to participate with the Office of Homeland Security and national security agencies on homeland security. These multi-agency workgroups are designed to ensure consistent implementation of standards and technologies across Federal agencies in order to support efficient data sharing.

EPA will continue to coordinate with key Federal data sharing partners including the USGS, Bureau of Indian Affairs, and the Fish and Wildlife Service as well as state and local data sharing partners in public access information initiatives. With respect to community-based environmental programs, EPA coordinates with state, Tribal, and local agencies, and with non-governmental organizations, to design and implement specific projects.

The nature and degree of EPA's interaction with other entities varies widely, depending on the nature of the project and the location(s) in which it is implemented. EPA is working closely with the FGDC and the USGS to develop and implement the infrastructure for national spatial data. EPA is coordinating its program with other state

and Federal organizations, including the Council for Environmental Quality and the Environmental Council of States, to insure that the appropriate context is represented for observed environmental and human health conditions.

EPA will continue to coordinate with other Federal agencies on IT infrastructure and security issues by participating on the Federal CIO Council. For example, EPA (along with the Department of Labor) recently co-chaired a Federal government committee on security. EPA will continue to participate on the CIO Council committees on security, capital planning, workforce development, interoperability, and e-Gov, and will engage with other Federal agencies in ensuring the infrastructure for homeland security.

EPA is a leader in many areas, such as E-dockets. EPA has a modern well-supported system that can host other Agencies' docket systems, thereby reducing their costs to develop or deploy such a system. EPA will also continue to coordinate with state agencies on IT infrastructure and security issues through state organizations such as the National Association of State Information Resources Executives. In addition, EPA, along with other Federal agencies, is involved in the OMB led e-Gov initiatives. As part of this effort, EPA, OMB, the Department of Transportation, and ten other Federal agencies are examining the expansion of EPA's Regulatory Public Access System, a

consolidated on-line rule-making docket system providing a single point of access for all Federal rules. EPA is also coordinating efforts with the National Archives and Records Administration on an e-records initiative. This effort is aimed at establishing uniform procedures, requirements, and standards for electronic record keeping of Federal e-Gov records.

Office of the Inspector General (OIG)

The EPA Inspector General is a member of the President's Council on Integrity and Efficiency (PCIE), an organization comprised of Federal Inspectors General (IG). The PCIE coordinates and improves the way IGs conduct audits and investigations, and completes projects of government-wide interest. The EPA IG chairs the PCIE's Environmental Consortium, GPRA Roundtable, and Human Resources Committee. The Consortium, which seeks effective solutions to cross-cutting environmental issues, currently includes representatives from 19 executive agencies and GAO. The OIG Computer Crimes Unit coordinates activities with other law enforcement organizations that have computer crimes units such as the Federal Bureau of Investigation, the Secret Service, and the Department of Justice. In addition, the OIG participates with various inter-governmental audit forums, professional associations, and other cross-governmental forums to exchange information, share best practices, and directly collaborative efforts.

MAJOR MANAGEMENT CHALLENGES

EPA continues to strengthen its management practices to achieve results and maintain public confidence. In FY 2004, for the third consecutive year, EPA reported no material weaknesses under the Federal Managers Financial Integrity Act (FMFIA). During the year, the Agency resolved three of its less severe, internal Agency weaknesses, which are reportable conditions that merit the attention of the Administrator.

OMB continues to recognize EPA's efforts to maintain effective and efficient management controls. Since June 2003, the Agency has maintained its "green" status score for Improved Financial Performance under the President's Management Agenda (PMA). Following are discussions of the Agency's management challenges and the progress made in addressing them.

Challenges in Addressing the Air Toxics Regulatory Program Goals

Challenge: *While EPA has achieved its Phase I goal of issuing technology-based standards, there are concerns about EPA's efforts to assess and implement Phase 2, residual risk standards, as well as the accuracy of air toxics data used in measuring progress.*

Agency Response: Since the passage of the Clean Air Act (CAA) Amendments of 1990, the Agency has worked to target its Air Toxics Program resources to sources with the greatest emissions and risks. The Agency completed a key provision of the CAA that addresses major stationary sources of air toxics by issuing 96 Maximum Achievable Control Technology (MACT) standards that apply to 174 industrial categories. This effort resulted in annual reductions of 1.5 million tons of toxic air

emissions and will achieve even greater reductions by 2007, when all sources must fully comply. Although the Agency has made great progress, it must prioritize resources in order to fully implement the remaining CAA requirements and maximize risk reduction. To date, the Agency has completed 15 area source standards and is developing standards for an additional 25 area source categories, projected for completion in 2008. Once completed, these 40 standards will address well over 90 percent of the toxicity-weighted emissions from area sources. EPA recently proposed its first residual risk standard for coke ovens and is developing rules for seven other industrial categories. EPA will continue to develop tools for risk screening and assessment and to train states, local agencies, and tribes in implementing the Residual Risk Program effectively. To track progress and ensure measurable reductions in air toxics, EPA is improving its air toxics monitoring network and is continuing to update the toxics inventory and exposure and risk estimates through the National Air Toxics Assessment every 3 years.

Rather than expending resources now on the last 30 area source categories, which represent only 10 percent of the area source toxicity-weighted emissions, EPA's strategy is first to address opportunities for more significant toxic emission reductions. Communities with numerous sources of air toxics may experience disproportionate risks. Because communities may be able to reduce some toxic sources more quickly and effectively through local initiatives than through national regulations, the CAA requires that the Area Source Program include a community support component. EPA has been providing funding, tools, and training to communities and tribes to address

their unique air toxic issues. EPA has aggressively addressed mobile sources through reformulated gasoline, engine standards, and other regulatory efforts, as well as through a voluntary diesel retrofit program. Based on 1990 levels, we expect a 90 percent reduction in diesel emissions and a 60 percent reduction in other mobile source air toxics by 2020.

EPA has developed and is implementing a comprehensive strategy for achieving toxic risk reductions and intends to work with its authorization and appropriations committees on these issues. EPA will also adjust its strategy as necessary to reflect legal constraints and maximize air toxic risk reductions.

Recent Accomplishments:

- Developed the Human Exposure Model as a tool to improve the quality of risk predictions for major point sources of air toxics.
- Developed the Total Risk Integrated Methodology to aid in multi-pathway risk characterizations.
- Revised air toxics performance measures to report reductions in toxicity-weighted emissions of hazardous air pollutants, more clearly linking program performance to environmental outcomes.

Plans for Further Improvements:

- Develop an innovative approach to assess low-risk facilities quickly and exempt them from future regulations.
- Develop an innovative approach to assess impacts from entire facilities, thus addressing together several source categories.
- Continue to improve the quality and timeliness of air toxic emissions inventories using the National Emission Inventory to estimate the tons of emissions reduced.

- Develop an air toxics monitoring network to supplement the “toxicity-weighted emissions” measure of risk reduction progress.

Reduce the Backlog of National Pollutant Discharge Elimination System (NPDES) Permits¹⁹

Challenge: *OIG is assessing the environmental impact of the NPDES backlog, how well the backlog measures reflect environmental impacts of delayed permit reissuance or issuance, and how successful EPA and states have been in managing the backlog.*

Agency Response: The NPDES permit backlog was identified as a material weakness, via the FMFIA process, in FY 1998 and reduced to an Agency weakness in FY 2002. Based on November 1998 Permit Compliance System (PCS) data, only 74 percent of expired permits for major facilities and 52 percent of expired permits for minor facilities had been reissued in a timely manner. Expired NPDES permits may not reflect the most recent applicable effluent limitations guidelines, water quality standards, or Total Maximum Daily Loads. Without timely issuance of high quality permits reflecting changed requirements, necessary improvements in water quality will be delayed.

EPA has made good progress in reducing the permitting backlog and has accelerated efforts to complete remaining actions and validate success. At the end of FY 2004, 85 percent of major facilities had current permits and 87 percent of minor facilities were covered by current permits (in FY 1998 the percentages were 74 and 52, respectively). Issuing major permits

¹⁹ U.S. EPA, Office of Water, *National Pollutant Discharge Elimination System (NPDES), Backlog Reduction*. Available at <http://cfpub.epa.gov/npdes/permitissuance/backlog.cfm>.

continues to present challenges due to competing priorities and the increasing complexity of permitting in a watershed context. The Permitting for Environmental Results initiative, designed to focus on permits expected to produce the most significant environmental results, is helping to address these challenges. An increasing number of states are issuing permits on a watershed basis and incorporating other innovative techniques, such as water quality trading, to address the NPDES backlog and reduce or eliminate discharges into the Nation's waters. As EPA continues to implement the revised combined animal feeding operations regulation, and focus on the most environmentally significant permits, reductions in pollutant loadings are expected to increase.

In FY 2005, the Agency will validate the effectiveness of the backlog reduction strategy through data analysis, using data systems and new oversight tools to provide quarterly monitoring of permit status and trends in related aspects of water programs.

Recent Accomplishments:

- Developed and began implementing (in 2003) the Permitting for Environmental Results (PERS) initiative to focus scarce permit writing resources on environmentally significant permits, improve the quality of national data on permit issuance, and reduce the backlog of NPDES permits. Over the past 5 years, state and regional efforts to implement EPA's permit issuance strategy have significantly reduced the permit backlog.
- Worked with states to develop permit issuance plans that focus on environmentally significant permits and ensure that the core NPDES permit program is implemented.
- Improved efficiency by developing tools to streamline the NPDES

permitting process (i.e., encouraging states to use general permits and automating the permit writing process).

- Developed and demonstrated an *E-NPDES* tool to generate higher quality permits and reduce errors in developing water quality-based effluent limits in permits.

Plans for Further Improvements:

- Work with 40 states to modernize the Agency's Permit Compliance System (PCS) to be more user-friendly and provide states and EPA with better program data.
- Continue to conduct NPDES Permit Writers' courses for regions and states to promote awareness of regulatory requirements.
- Develop state profiles that identify the strengths and innovations of each State program that can be shared with other States, as well as needed program enhancements that will improve the quality and/or integrity of the State's NPDES program.
- Conduct additional data quality assurance reviews to eliminate incorrect and outdated records from PCS and increase the percentage of permit records with locational data, thus allowing EPA to better characterize the environmental impact of backlog.

Management of Biosolids

Challenge: *Although EPA is directing renewed attention to biosolids, the Agency needs to strengthen the science, and establish strong enforcement to meet the CWA requirements to reduce risks and ensure biosolids are managed in compliance with all applicable laws and requirements.*

Agency Response: OIG is concerned that "biosolids" will pose a potential risk until

the Agency can adequately implement a national biosolids program and obtain the scientific information it needs to make informed decisions about biosolids. EPA continues to meet its statutory obligations under the CWA pertaining to biosolids (40 CFR Part 503) as well as maintain an active presence in biosolids compliance and enforcement activities. To prevent risk to human health and the environment, the Agency is addressing concerns about the adequacy of the sewage sludge rule, expanding biosolids-related research, and actively addressing biosolids violations and proper land-application.

EPA's enforcement and compliance activities are tracked in the Integrated Compliance Information System (ICIS) database and include enforcement actions also entered into the CWA Permit Compliance System (PCS). The ICIS database reports for FY 1995-2003, include over 500 federal enforcement actions taken to address violations of Part 503, sewage sludge standards. In December 2003, EPA published a *Federal Register* notice presenting 14 activities the Agency expects to begin or complete within the next 2-3 years to strengthen the sewage sludge use and disposal program (see highlights below for examples)

To assist states and regions in their oversight of the biosolids program, the Agency has, either in place or in development, tools to assist and promote compliance with biosolids regulatory requirements (e.g., on-line training which includes a segment on conducting sewage sludge inspection). In the compliance monitoring and compliance assistance areas, a number of activities are completed or are ongoing to respond to concerns raised by the OIG. The ICIS/PCS database includes 494 regional and state biosolids inspections for FY 2000 to FY 2003, which demonstrates a significant inspection presence. A number of states are

not covered by the ICIS/PCS information for biosolids inspections, so the actual number of biosolids inspections is likely even greater. Part of the PCS Modernization effort is to include data entry from more states in the system.

Recent Accomplishments:

- Produced Clean Water Act / NPDES Computer-Based Inspector Training which includes a segment on conducting Sewage Sludge (Biosolids) inspections.
- As part of the PCS modernization, a separate workgroup (including both states and EPA) was devoted to defining the data needs of the biosolids program. The roll out of the modernized PCS, which includes standardized data elements for use by the states, will be staged over several years, with the initial availability for direct user states and follow-on availability for indirect user states who will batch load information to the system.
- Publication in the Federal Register, at 68 FR 75531, of the 14 - point action plan which includes: biennial review of the Part 503 Standards for the potential addition of new pollutants; field studies on the land application of sewage sludge; and development of improved analytical methods for the quantification of microbial pollutants in sewage sludge. The other parts of the action plan can be found in the Federal Register.

Plans for Further Improvements:

- EPA plans to monitor scientific findings in this area and will re-evaluate its compliance and enforcement approach as needed.

Superfund Evaluation and Policy Identification

Challenge: *OIG believes EPA faces significant challenges in its ability to meet effectively current and future Superfund needs and must establish a strong working relationship between states and tribes in order to achieve its environmental goals.*

Agency Response: In an April 21, 2004 memorandum on *EPA's Key Management Challenges*, OIG stated that EPA faces significant challenges in managing the Superfund program now and in the future. EPA acknowledges its fiscal and program management challenges, some of which are beyond the Agency's control, and is working to address them. The Superfund program is inherently complicated and complex, dealing with cleanup requirements that have been changing almost since inception 24 years ago. However, despite the program's complexity and its unique administrative structure, it has made and continues to make significant progress in cleaning up Superfund sites and reducing risks to human health and the environment.

Subject to the same budget constraints as are other federal programs, Superfund program for the past 2 years has been unable to fully fund all of the sites in the queue for construction. Although the President requested a \$150 million budget increase in FY 2004 and 2005 to begin new construction projects at sites throughout the country the increase was not funded by Congress in either year. Also, over the past 10 years EPA Superfund appropriation has remained level, (roughly between \$1.1 and \$1.4 billion per year) while costs have increased. To promote program cost-effectiveness, the Agency has initiated several efforts, including prioritizing sites for listing on the National Priorities List (NPL), reviewing remedy options for sites over \$30 million, and establishing a nationwide priority setting process for remedial action. The Superfund Pipeline

Management Review ensures that Superfund resources are distributed throughout the Superfund "pipeline" to optimize results: a panel reviews risks and other factors and alternatives and sets site priorities for NPL listing and construction funding.

While the OIG suggested that EPA needs to determine potential future financial and environmental liability from possible new sites, the Agency does not maintain an inventory of sites that have not yet entered the Superfund program. Likewise, it keeps no inventory of companies with financial problems that might also have environmental liabilities. Extensive research is required to identify potentially responsible parties or other sources to finance site cleanups. Through EPA's Environmental Financial Advisory Board, the Agency has undertaken a major effort to better understand financial assurance mechanisms and how they might be applied in waste management programs.

OIG recognizes that the fundamental pieces of the tribal program already exist, and that EPA has made significant efforts to enhance the role of tribes in the Superfund program. OIG states that the Agency's three major initiatives since 1998 have produced some positive results and lessons that have been incorporated into the Agency's current strategy for managing the role of tribes. The Agency will continue to coordinate with tribes and EPA regions to complete the remaining key actions of the strategy.

Recent Accomplishments:

- Initiated and completed an internal review of the Superfund Program (120 Day Study) to identify opportunities for program efficiencies that would enable the Agency to begin and ultimately complete remedial actions with current resources.

- Completed data collection and analysis on hazardous sites impacting Indian country.
- Established the EPA tribal forum to work collaboratively on issues involving tribes.
- Worked through the FY 2005 planning process to identify regional resource needs related to cleanup of contaminated sites.
- Worked to increase oversight of the Tribal Association on Solid Waste and Emergency Response (TASWER) cooperative agreement, in accordance with commitments to OIG.

Plans for Further Improvements:

- Continue work with the regions to allocate resources and maximize results.
- Finalize an OSWER Tribal Strategy that will require completing the Superfund Tribal Strategy and implementation plan.
- Review, implement, and track progress of recommendations from the 120-Day Study on Superfund to identify opportunities for program efficiency.

Information System Security

Challenge: *Due to the dynamic nature of information security, EPA needs to continue its emphasis and vigilance on strong information security.*

Agency Response: OIG believes EPA needs to take additional actions (e.g., systematic monitoring and evaluation programs, implementation of training programs) to protect its information and systems. While the Agency agrees that it needs to continue its emphasis and vigilance on strong information security, EPA believes it has addressed the specific

management control issues related to information systems security. In FY 2001, EPA acknowledged this topic as an Agency weakness under FMFIA. The Agency completed the corrective actions and validated the effectiveness of its comprehensive strategy to systematically address security related deficiencies in FY 2002.

EPA continues to improve the management and oversight of the Agency information security program and has successfully demonstrated a high level of security for its information resources and environmental data. In FY 2004, EPA established management controls to ensure that it collects data of sufficient quality to verify Agency-wide implementation of the program; information security staff is adequately trained; and security practices are in place throughout the entire life cycle of information systems. Additionally, for the first time, EPA earned a “green” status score under PMA for *E-Government* for its information security management controls and processes that are in place at the Agency.

Recent Accomplishments:

- Established and implemented a testing and evaluation process to develop information sufficient to verify the effectiveness of Agency-wide Information Security Program implementation.
- Developed and ensured implementation of a training program to provide information security training to EPA employees with significant information security responsibilities.
- Established policy and management framework to support development and testing of up-to-date contingency plans for Agency information systems.

Plans for Further Improvements:

- Continue to verify Agency-wide implementation.
- Ensure incorporation of information security into Agency information system life cycle.
- Review Agency systems for conformance to security requirements of revised System Life Cycle Policy through the Capital Planning and Investment Control (CPIC) process.
- Continue to require systems without up-to-date tested contingency plans to submit milestones to be tracked in the Agency's central POA&M project management system.

Information Resources Management (IRM) and Data Quality

Challenge: *EPA faces a number of challenges (e.g., implementing data standards to facilitate data sharing; establishing quality assurance practices to improve the reliability, accuracy, and scientific basis of environmental data) with the data it uses to make decisions and monitor progress against environmental goals.*

Agency Response: EPA has made significant progress in addressing its data management challenges. The Agency acknowledged *Laboratory Quality Systems Practices* and *Data Management Practices* as Agency weaknesses under FMFIA in FY 2001 and has made great progress in addressing these issues over the past several years. EPA has addressed all corrective actions related to *Laboratory Quality Systems Practices* and is currently validating the approach and newly established controls put in place to address the *Data Management Practices* issue.

EPA continues to improve data management and use by planning and providing tools for sharing data effectively, integrating data,

and identifying key data gaps. EPA has also implemented improvements to assure that environmental data used to support EPA's decisions are of documented quality. In FY 2004, EPA developed guidance on the use of administrative control designations to help staff recognize the type of information that must be protected from unauthorized disclosures. To further improve environmental information management, the Agency will focus on developing and implementing appropriate data management policies and procedures and creating a plan for addressing data gaps.

Recent Accomplishments:

- Completed version 1.0 of the Agency Enterprise Architecture (EA), of which the data architecture is a component.
- Developed a policy and is implementing procedures to support the development of a metadata management program within the Agency that requires the Agency's data to be sufficiently documented.
- Established the technical and business guidelines for the use of standard data elements.²⁰
- Launched the Environmental Indicators Initiative, which carries out the first objective under Goal 1 of the EPA Strategic Information Plan (i.e., the need to identify key data gaps and for the Agency to fill the gaps).
- Completed the EPA Strategic Information Plan: A Framework for the Future.

Plans for Further Improvements:

- Develop a process for identifying key data gaps.
- Facilitate further discussion within the Agency and with Federal

²⁰ U.S. EPA, Business rules for the use of standard data elements in the EDR. Available at [http://oaspub.epa.gov/edr/epastd\\$.startup](http://oaspub.epa.gov/edr/epastd$.startup).

partners on the data gaps identified in the *Draft Report on the Environment 2003*.²¹

- Work with states and tribes to further expand the National Environmental Information Exchange Network to streamline reporting and improve data sharing.
- Develop an executive-summary-level report to validate the completion of each corrective action.

Human Capital Strategy Implementation/Employee Competencies

Challenge: *While EPA is making progress on human capital efforts, it must continue developing and implementing its Human Capital Strategy and focus on accountability and better communication of planned strategies.*

Agency Response: OMB and OIG acknowledge the Agency has made progress in the area of human capital. In FY 2004, EPA achieved “green” progress and “yellow” status scores for successfully implementing the human capital component of the PMA. However, EPA continues to face significant challenges in maintaining a workforce with the highly specialized skills and knowledge required to accomplish its work. For example, retirement projections for FY 2004 through FY 2007 indicate that 27 percent of the EPA workforce will be eligible to retire within the next 5 years, including 26 percent of the scientific-technical workforce and 54 percent of the Senior Executive Service. EPA is working to develop a systematic approach to workforce planning, based on reliable and valid workforce data that ensures the Agency can continue to fulfill its legal, regulatory, and fiduciary responsibilities.

To ensure that the Agency’s Human Capital activities support the agency mission and are in compliance with the merit system principles, the Agency completed a Human Capital Strategy (HCS) and created a National Human Capital Strategy Office. The HCS is designed around four key areas: Strategic Alignment, Program Effectiveness, Operational Efficiency, and Measures of Legal Compliance. Additionally, in FY 2004 the Agency began documenting the relationship between every employee’s work and the Agency’s strategic goals to fulfill Agency commitment to the Office of Personnel Management (OPM) and OMB.

EPA has taken the crucial steps in the areas of workforce planning and staff development, with particular emphasis on management development. EPA continues to invest in the development of its workforce with the implementation of the Workforce Development Strategy (WDS), a comprehensive set of developmental programs. The WDS is designed to link needed competencies to mission needs, along core business lines, and aligns with the core competencies identified by OPM for senior executives. EPA offers a developmental program that addresses the needs of all employees from administrative personnel to executive staff.

Recent Accomplishments:

- Upgraded PeopleSoft to the web-enabled version and implemented the automated time-keeping and payroll processes.
- Completed the advertisement and screening of EPA’s seventh Intern Program class. Via this highly successful program, EPA is poised to hire up to 25 new candidates this year to infuse new talent into the Agency. Over the past 6 years, EPA has hired 191 highly qualified and diverse interns.

²¹ U.S. EPA, *EPA Draft Report on the Environment 2003* (EPA-260-R-02-006). Available at <http://www.epa.gov/indicators/roe/index.htm>

- Conducted a human resources (HR) assessment for Headquarters HR professionals to identify current skill/competency requirements and determine existing proficiency levels. This was a first step towards implementing the HR Certification Program and training that will focus on current skill gaps and development needed to support the changing role of HR professionals.
- Reorganized the human resources program and created the “National Human Capital Strategy Office.” The new office is responsible for implementation of the Agency’s Human Capital Strategy.
- Provided on-going learning opportunities and just-in-time training to all EPA employees. Go-Learn on-line courses allow employees to focus on the specific developmental skills in an environment and at a pace best suited for their learning needs.
- Facilitated a two-day leadership workshop for EPA employees interested in pursuing a formal leadership role in the Agency. The course includes an advanced 360 assessment tool, information on various leadership roles available in the Agency, and tools and tips on enhancing critical leadership skills.
- Implemented five Mid-level Development workshops that focus on the core competency groups necessary for success in a work environment. The workshops are designed to help employees be more creative in their approach to working with others, projects, process, and change, while enhancing their professional results.
- Continued to offer a four (4) day supervisory training program to new and existing supervisors and

managers. This course focuses on the critical non-technical skill development necessary for successfully partnering with their employees. Employees take part in hands on exercises relating to diversity, self-awareness, conflict management, coaching, human resources, and other areas.

- Completed a strategic workforce analysis of workforce requirements at the macro, Agency, level.
- Launched an Agency-wide succession management strategy.

Plans for Further Improvements:

- Focus efforts on generating an Agency-level view of our workforce needs complemented with “local” strategic workforce planning data.
- Continue to invest in the development of an internal coaching cadre which offers one-on-one coaching for our SES Candidates and for managers after completion of a 360 Assessment.
- Implement an Agency-wide mentoring program to provide the support and nurturing required ensuring that our workforce can fully develop to their maximum potential.

Agency Efforts in Support of Homeland Security (formerly, Protecting Critical Infrastructure from Non-traditional Attacks)

Challenge: *EPA needs to develop better processes for ensuring security at Nationally Significant Events, assess vulnerability of water utilities and determine how to measure water security improvements, and better define the Agency’s role in protecting air from terrorist threats.*

Agency Response: OIG commends EPA for its efforts to enhance homeland security and its quick response to incidents, but believes the Agency needs to effectively

coordinate at all levels of government and industry. EPA is working to increase its policy leadership and development of key Homeland Security Programs in response to Homeland Security Presidential Directives taskings, by building upon existing water security plans, effective decontamination efforts, and timely and accurate lab capacity support. These important efforts promote the Agency's role in protecting the nation from terrorist threats.

Since its inception in February 2003, EPA's Office of Homeland Security has coordinated and led homeland security activities and policy development across program areas and government-wide (e.g., serves as the point of contact for the Department of Homeland Security (DHS) and the White House Homeland Security Council (HSC) and represents the Agency on Homeland Security issues). EPA led a collaborative effort (with the White House HSC, DHS and OMB) to revise the EPA Homeland Security Strategic Plan. The revised Plan identifies the range of homeland security activities the Agency conducts, taking into account the evolving role of the DHS. The Agency also spent considerable time and effort mapping out responsibilities and strategies to address recently issued Presidential Directives.²²

To help improve processes for cross-agency Homeland Security coordination, EPA established and convened the Homeland Security Policy Coordination Committee (PCC). The PCC serves as an executive committee that can be activated in the event of a homeland security-related attack and acts to ensure that the Agency's senior political leadership is brought together to provide policy direction to responders.

²² The White House Office of the Press Secretary, Homeland Security Presidential Directives, (December 17, 2003), available at <http://www.whitehouse.gov/news/releases/2003/12/20031217-5.html>

Recent Accomplishments:

- Established the Homeland Security Collaborative Network to coordinate and directly address high priority, cross-Agency technical and policy issues related to homeland security programs.
- Implemented key homeland security efforts including budget planning and implementation at EPA.
- Supported federal law enforcement Agencies at Nationally Significant Events (e.g., U.S. Secret Service and FBI during the G-8 Nations Summit).
- Participated in over 150 training exercises to improve homeland security readiness, including a field exercise at Ft. Leavenworth, KS that tested the Agency's ability to respond to multi-state radiological contamination resulting from a downed satellite.
- Provided tools, training, and technical assistance to drinking water and wastewater utilities, specifically the 9,000 drinking water systems that have assessed the vulnerabilities and are preparing or revising their emergency response plans in accordance with the Bioterrorism Act.

Plans for Further Improvements:

- Prepare the Agency to fulfill its responsibilities under new Homeland Security Presidential Directives.
- Establish function-specific liaison responsibilities to enhance the effectiveness of communication across EPA.
- Develop a homeland security information management system.

Linking Mission and Management

Challenge: *OIG believes that while EPA has begun linking costs to goals, it must continue to work with its 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 the Agency's decision-making process.

Agency Response: OIG noted that EPA's reliance on output measures makes it difficult to provide regions and states the flexibility they need to direct resources to their highest priority activities and to assess the impact of Agency's work on human health and the environment. EPA believes that its program goals, performance objectives, and measures of effectiveness are connected, and the Agency continues to make progress in linking assessments of program performance with resource decisions; developing outcome-oriented goals and measures; and providing managers with timely, reliable, and consistent cost information.

EPA has been recognized across government for its efforts to improve the way the Agency manages for results and uses cost performance information in decision making. In 2003, the Agency received the President's Quality Award for significant accomplishments in financial performance. Since June 2003, the Agency has maintained a "green" status score for Improved Financial Performance. In addition, since June 2002 EPA has earned a "green" progress score for Budget and Performance Integration under the President's Management Agenda for all but one quarter.²³

Recent Accomplishments: Developed Regional Plans that link EPA's regional

environmental priorities to the Agency's

²³ EPA selected as finalist for the 2002 Presidential Quality Award in Area of Budget and Performance Integration, news release. Available at <http://www.whitehouse.gov/news/releases/2002/11/20021125-2.html>.

five strategic goals.²⁴

- Increased the percentage of annual goals classified as outcomes from 44 percent of the total in FY 2004 to 62 percent for FY 2005.
- Increased the percentage of performance measures classified as outcomes from 51 percent in FY 2004 to 64 percent for FY 2005.
- Completed PART assessments for 32 programs covering over 60 percent of the Agency's budget. OMB approved efficiency measures for 22 of the 32 programs assessed with the PART.
- Launched a business reporting tool, ORBIT, which allows easy access to financial and budget information. ORBIT currently has over 360 users Agency-wide.
- Implemented a newly developed Annual Commitment System to foster discussion and agreement between regional and national program offices on FY 2005 regional performance commitments.

Plans for Further Improvements:

- Enhance ORBIT's functionality by expanding the programmatic and performance reporting capability and adding additional data sources.
- Begin the process of revising the Agency's Strategic Plan

Grants Management and Use of Assistance Agreements

Challenge: *EPA needs to improve oversight for awarding and administering assistance agreements to ensure effective and efficient use of resources. Recent OIG and GAO audits continue to identify problems in the use of assistance agreements.*

Agency Response: Assistance agreements

²⁴ U.S. EPA, Regional Plans. Available at <http://www.epa.gov/ocfopage/regionplans/regionalplans2.htm>

are one of EPA's primary mechanisms for carrying out its mission to protect human health and the environment. The Agency awards approximately half of its budget to organization through assistance agreements. Thus it is imperative that the Agency use good management practices in awarding and overseeing these agreements to ensure they contribute cost effectively to attaining environmental goals.

EPA acknowledges OIG and GAO concerns regarding the management of assistance agreements, and tracks this issue as an Agency weakness in the FMFIA process. The Agency has made significant progress in developing and implementing a comprehensive system of management controls to correct grants management problems. EPA issued its first long-term Grants Management Plan,²⁵ with associated performance measures, in April 2003. The plan, which GAO recognizes as a comprehensive and coordinated plan to strengthening grants management, outlines an aggressive approach to ensure that the commitments are fully implemented and that employees are held accountable for managing grants effectively. Also, EPA established a Grants Management Council, composed of EPA's Senior Resource Officials to provide the leadership, coordination, and accountability need to implement the plan.

Recent Accomplishments:

- Revised the Grants Competition Policy to lower the competition threshold and increase the number of grant competitions
- Issued EPA Order 5700.6, a comprehensive post-award monitoring policy that requires base line monitoring on all active awards and establishes an advance monitoring performance

requirement of 10 percent of all EPA's active grantees and mandatory reporting of the reviews in a Grantee Compliance Database.

- Instituted a new approach to internal reviews that provides EPA with an early warning system to detect emerging grant weaknesses.
- Conducted classroom training sessions for non-profit and Tribal recipients to educate them about their grants management responsibilities.
- Issued guidance requesting that EPA's Senior Resource Officials review and revise all non-SES performance standards and position descriptions to ensure that they accurately reflect grants management responsibilities.
- Issued the Grants Management Training Plan which requires expanded training for project officers, grant specialists, and potential grant recipients in areas identified in OIG and GAO audits reports and EPA's own internal reviews.
- Issued a Roles and Responsibilities policy for grants management which clarifies the duties of program offices and grants management offices.
- Developed an EPA Order on environmental results under assistance agreements designed to make grants more outcome-oriented and linked to EPA's Strategic Plan. The Order is effective January 2005.
- Deployed the Integrated Grants Management System (IGMS) to the Regions and automated the grants process.

Plans for Further Improvements:

- Issue a new EPA Order on pre-award reviews to help ensure that non-profit applicants have the administrative and programmatic capabilities to manage EPA grant funds. (March 2005).

²⁵ U.S. EPA, EPA Grants Management Plan. Available at <http://www.epa.gov/ogd/EO/finalreport.pdf>

- Deploy IGMS in EPA Headquarters to leverage technology and improve program performance.
- Expand the Grantee Compliance Database to include more information on OIG and GAO reports, Agency advanced monitoring reviews, and significant compliance actions taken by the Agency to improve the ability to identify systematic issues early and take appropriate corrective action.
- Conduct grants management training for managers and supervisors.

EPA USER FEE PROGRAM

In FY 2006, EPA will have several user fee programs in operation. These user fee programs and proposals are as follows:

Current Fees

- **Pre-Manufacturing Notification Fee**

Since 1989, this fee has been collected for the review and processing of new chemical Pre-Manufacturing notifications (PMN) submitted to EPA by the chemical industry. These fees are paid at the time of submission of the PMN for review by EPA's Office of Prevention, Pesticides and Toxic Substances. PMN Fees are authorized by the Toxic Substances Control Act and contain a cap on the amount the Agency may charge for a PMN review. EPA expects to collect \$1,800,000 in PMN Fees in FY 2006. The removal of the statutory fee cap is discussed below under User Fee Proposals.

- **Lead Accreditation and Certification Fee**

The Toxic Substances Control Act, Title IV, Section 402(a)(3), mandates the development of a schedule of fees for persons operating lead training programs accredited under the 402/404 rule and for lead-based paint contractors certified under this rule. The training programs ensure that lead paint abatement is done safely. Fees collected for this activity are deposited in the U.S. Treasury. EPA estimates that less than \$500,000 will be deposited in FY 2006.

- **Motor Vehicle and Engine Compliance Program Fee**

This fee is authorized by the Clean Air

Act of 1990 and is managed by the Office of Air and Radiation. Fee collections began in August 1992. This fee is imposed on manufacturers of light-duty vehicles, light and heavy trucks and motorcycles. The fees cover EPA's cost of certifying new engines and vehicles and monitoring compliance of in-use engines and vehicles. In 2004, EPA promulgated a rule that updated existing fees and established fees for newly-regulated vehicles and engines. The fees established for new compliance programs are also imposed on heavy-duty, in-use, and nonroad industries, including large diesel and gas equipment (earthmovers, tractors, forklifts, compressors, etc), handheld and non-handheld utility engines (chainsaws, weed-whackers, leaf-blowers, lawnmowers, tillers, etc.), marine (boat motors, tugs, watercraft, jet-skis), locomotive, aircraft and recreational vehicles (off-road motorcycles, snowmobiles). In FY 2006, EPA expects to collect \$18,000,000 from this fee.

Current Fees: Pesticides

The FY 2006 President's Budget reflects implementation of the new fee structure for the Pesticides Programs, as enacted by the Pesticides Registration Improvement Act (PRIA) of 2003. The new structure includes an extension to the Maintenance Fee for older pesticide review, and a new Enhanced Registration Services Fee, which supports accelerated review of new registration actions for pesticides.

- **Pesticides Maintenance Fee Extension**

The Maintenance Fee provides funding for both the Tolerance Reassessment and

the Reregistration programs. PRIA extended the authorization of the Maintenance Fee through 2008. The existing tolerance reassessment program is slated for completion in 2006, under the FQPA statute, and the final reregistration decisions are scheduled for 2008. The tolerance reassessment and reregistration activities will continue under the to-be-established Registration Review program. In FY 2006, the Agency expects to collect \$27,000,000 in Maintenance fees.

- **Enhanced Registration Services**

PRIA enacted a new fee specifically for accelerated pesticide registration decision service. This new process should encourage the introduction of new pesticides to the market more quickly. These fees will be paid to the Agency at the time the registration action request is submitted. In FY 2006, Agency expects to collect \$15,000,000 in Enhanced Registration Service fees.

User Fee Proposals

- **Removal of the Statutory Cap on the Pre-Manufacturing Notification Fee**

Language will be submitted to remove the statutory cap in the Toxic Substances Control Act on Pre-Manufacturing Notification (PMN) Fees and to allow the increase in fees to be used as a discretionary offset. Under the current fee structure, the Agency would collect \$1,800,000 in FY 2006. The increase in PMN fees will be deposited into a special fund in the U.S. Treasury and

available to the Agency, subject to appropriation. After the anticipated rulemaking, the Agency estimates collections of an additional \$4,000,000 in FY 2006.

- **Pesticides Registration Fee**

Language will be submitted to eliminate the prohibition on collecting the existing pesticides Registration fee originally codified in 1988 (40 CFR 152 subpart U) and to allow the fees to be used as a discretionary offset. The authority to collect these fees has been blocked through appropriations acts since 1989. Most recently, provisions in the FY 2004 Consolidated Appropriations Act (P.L. 108-199) extended the prohibition through 2010. FY 2006 collections are estimated to be \$26,000,000.

- **Tolerance Fee Rule**

Language will be submitted to eliminate the prohibition on collecting pesticide Tolerance fees and to allow the fees to be used as a discretionary offset. The collection of this fee has been blocked in appropriations acts since 2001. Most recently, provisions in the FY 2004 Consolidated Appropriations Act (P.L. 108-199) extended the prohibition through 2008. EPA will update the tolerance fee rule to eliminate overlap with other authorized fees and will promulgate the final Tolerance fee rule in 2005. The Tolerance fee collections for FY 2006 are estimated to be \$20,000,000.

WORKING CAPITAL FUND

In FY 2006, the Agency begins its tenth year of operation of the Working Capital Fund (WCF). It is a revolving fund authorized by law to finance a cycle of operations, where the costs of goods and services provided are charged to users on a fee-for-service basis. The funds received are available without fiscal year limitation, to continue operations and to replace capital equipment. EPA's WCF was implemented under the authority of Section 403 of the Government Management Reform Act of 1994 and EPA's FY 1997 Appropriations Act. Permanent WCF authority was contained in the Agency's FY 1998 Appropriations Act.

The Chief Financial Officer initiated the WCF in FY 1997 as part of an effort to: (1) be accountable to Agency offices, the Office of Management and Budget, and the Congress; (2) increase the efficiency of the administrative services provided to program offices; and (3) increase customer service and responsiveness. The Agency has a WCF Board which provides policy and planning oversight and advises the CFO regarding the WCF financial position. The Board, chaired by the Associate Chief

Financial Officer, is composed of eighteen permanent members from the program offices and the regional offices.

Two Agency Activities begun in FY 1997 will continue into FY 2006. These are the Agency's information technology and telecommunications operations, managed by the Office of Environmental Information, and Agency postage costs, managed by the Office of Administration. The Agency's FY 2006 budget request includes resources for these two Activities in each National Program Manager's submission, totaling approximately \$184.0 million. These estimated resources may be increased to incorporate program office's additional service needs during the operating year. To the extent that these increases are subject to Congressional reprogramming notifications, the Agency will comply with all applicable requirements. In FY 2006, the Agency will continue to market its information technology services to other Federal agencies in an effort to deliver high quality services external to EPA, which will result in lower costs to EPA customers.

CARRYOVER AND OUTLAYS**By Appropriation Accounts**

Dollars in Millions

| APPROPRIATION | 2004 | | 2005 | | 2006 | |
|----------------------|----------------------------------|------------------------|----------------------------------|------------------------|----------------------------------|------------------------|
| | END OF YEAR CARRYOVER | NET OUTLAYS | END OF YEAR CARRYOVER | NET OUTLAYS | END OF YEAR CARRYOVER | NET OUTLAYS |
| STAG | \$1,453 | \$3,904 | \$1,443 | \$3,592 | \$1,217 | \$3,722 |
| B&F | \$4 | \$37 | \$3 | \$38 | \$3 | \$41 |
| EPM | \$255 | \$2,167 ²⁶ | \$298 | \$2,171 | \$247 | \$2,319 |
| SF | \$837 | \$1,468 | \$919 | \$1,257 | \$985 | \$1,289 |
| LUST | \$6 | \$72 | \$2 | \$72 | \$2 | \$78 |
| IG | \$13 | \$35 | \$12 | \$37 | \$11 | \$38 |
| OIL | \$57 | \$11 | \$53 | \$12 | \$58 | \$15 |
| S&T | \$269 | \$731 | \$253 | \$746 | \$300 | \$806 |
| WCF | \$11 | \$4 | \$10 | \$15 | \$36 | \$2 |
| TOTAL | \$2,906 | \$8,429 | \$2,993 | \$7,940 | \$2,859 | \$8,310 |

²⁶ Includes \$3 million in discretionary outlays for Pesticide Registration Fund (020-00-5374) and \$15 million in receipts from Registration service fees (020-00-537410)

ANNUAL PERFORMANCE GOALS AND MEASURES

Clean Air and Global Climate Change

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

OBJECTIVE: HEALTHIER OUTDOOR AIR

Through 2010, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.

Reduce Air Toxic Emissions

- In 2006 Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by an additional 2% of the updated 1993 baseline of 6.0 million tons for a cumulative reduction of 40%.
- In 2006 Complete the phase out of leaded gasoline in 20 countries in Africa through the partnership for clean fuels and vehicles.
- In 2005 Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by an additional 1% of the updated 1993 baseline of 6.0 million tons for a cumulative reduction of 38%.
- In 2004 The Agency is currently working on updating the NEI and expects to have FY 2004 results in the last quarter of FY 2012.
- In 2003 End-of-year- FY 2003 data will be available in late 2009 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by an additional 1% of the updated 1993 baseline of 6.0 million tons for a cumulative reduction 35%.
- In 2002 End-of-year FY 2002 data will be available in late 2004 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 1.5% from 2001 for a cumulative reduction of 33.5% from the 1993 baseline of 6.0 million tons per year.

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In 2001 End-of-year FY 2001 data will be available in late 2004 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 5% from 2000 (for a cumulative reduction of 35% from the 1993 level of 4.3 million tons.)

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|--------------|
| Number of countries completing phase out of leaded gasoline | | | | | | 20 | countries |
| Total Cumulative reductions in Air Toxics Emissions (% reductions from baseline). | Data Lag | Data Lag | Data Lag | | 1 | 40 | Percent |
| Annual percentage of combined stationary and mobile source reductions in air toxic emissions. | | | | | | 2 | Percent |
| Mobile Source Air Toxics Emissions Reduced | | | | | .80 | .89 | Million Tons |
| Major Stationary Source Air Toxics Emissions Reduced | | | | | 1.59 | 1.64 | Million Tons |
| Area and All Other Air Toxics Emissions Reduced | | | | | +14 | +15 | Million Tons |

Baseline: The baseline begins in 1993. This is the year before the first MACT (Maximum Achievable Control Technology) and mobile source regulations developed under the Clean Air Act were to be implemented. Air toxics emissions data are revised every three years to generate inventories for the National Emissions Inventory (NEI), which replaced the National Toxics Inventory (NTI). In intervening years between updates of the NEI, the model EMS-HAP (Emissions Modeling System for Hazardous Air Pollutants) is used to estimate and project annual emissions of air toxics. As new inventories are completed and improved inventory data is added, the baseline (or total tons of air toxics) is adjusted. The next run of the EMS-HAP, using the final 1999 NEI data, is scheduled for Fall 2004. After that, actual numbers will be available for FY 2000 and 2001 respectively. The toxicity-weighted emission inventory will also utilize the NEI for air toxics along with the Agency's compendium of cancer and noncancer health risk criteria to develop a risk metric that can be tabulated and tracked on an annual basis. The baseline is based on emission inventory data from 1990-1993.

Air Toxicity-Weighted

In 2006 Reduction in tons of toxicity-weighted for cancer and non-cancer emissions of air toxics from 1993 baseline.

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------|
| Reduction in tons toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline. | | | | | | 22 | Percentage |
| Reduction in tons of toxicity-weighted (for noncancer risk) emissions of air toxics from 1993 baseline. | | | | | | 55 | Percentage |

Baseline: The toxicity-weighted emission inventory will also utilize the NEI for air toxics along with the Agency's compendium of cancer and noncancer health risk criteria to develop a risk metric that can be tabulated and tracked on an annual basis. The baseline is based on emission inventory data from 1990-1993.

Reduce SO2 Emissions

- In 2006 Keep annual emissions below level authorized by allowance holdings and make progress towards achieving the year 2010 SO2 emissions cap for utilities. Annual emissions reduction target is 7.0million tons from the 1980 baseline.
- In 2005 Keep annual emissions below level authorized by allowance holdings and make progress towards achieving the year 2010 SO2 emissions cap for utilities. Annual emissions reduction target is 6.9 million tons from the 1980 baseline.
- In 2004 Although data is not available for FY 2004, EPA has continued to meet and exceed this goal for the previous 3 years. FY 2004 data will be available in the last quarter of 2005 to verify that annual emissions reduction of approximately 5 millions tons from utility sources were maintained or increased during 2004.
- In 2003 SO2 emissions were reduced by approximately 39 percent (6.8 million tons) from the 1980 level of 17.4 million tons, approaching the 50 percent reduction goal from 1980 level by 2010.
- In 2002 SO2 emissions were reduced by approximately 40 percent (7 million tons) from the 1980 level of 17.4 million tons, approaching the 50 percent reduction goal from 1980 level by 2010.
- In 2001 Approximately 5 million tons of SO2 emissions from utility sources were reduced from the 1980 baseline.

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| | | | | | | | |
|-----------------------|-----------|-----------|-----------|-------------------|------------|-----------|-----------------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| SO2 Emissions Reduced | 6,670,000 | 7,000,000 | 6,800,000 | Data avail. 05 | 6,900,000 | 7,000,000 | Tons Reduced |

Baseline: The base of comparison for assessing progress on the annual performance goal is the 1980 emissions baseline. The 1980 SO2 emissions inventory totals 17.4 million tons for electric utility sources. This inventory was developed by National Acid Precipitation Assessment Program (NAPAP) and used as the basis for reductions in Title IV of the Clean Air Act Amendments. This data is also contained in EPA's National Air Pollutant Emissions Trends Report. Statutory SO2 emissions cap for year 2010 and later is at 8.95 million tons which is approximately 8.5 million tons below 1980 emissions level. "Allowable SO2 emission level" consists of allowance allocations granted to sources each year under several provisions of the Act and additional allowances carried over, or banked, from previous years.

Reduce Exposure to Unhealthy PM Levels - PM-10

- In 2006 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-10 standard will increase by 4% (relative to 2005) for a cumulative total of 11% (relative to 1992).
- In 2005 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-10 standard will increase by 1% (relative to 2004) for a cumulative total of 7% (relative to 1992).
- In 2004 EPA is not on track to meet its goal.
- In 2003 Maintained healthy air quality for 6.1 million people living in monitored areas attaining the PM standards; increased by 228 thousand the number of people living in areas with healthy air quality that have newly attained the standard.
- In 2002 Maintained healthy air quality for 3.4 million people living in monitored areas attaining the PM standards; and increased by 2.7 million the number of people living in areas with healthy air quality that have newly attained the standard.
- In 2001 EPA maintained healthy air quality for 1.189 million people living in 9 areas attaining the PM standards and

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increased by 2.249 million the number of people living in areas with healthy air quality that have newly attained the standard.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Cumulative Percent Increase in the Number of People who Live in Areas with Ambient PM-10 Concentrations Below the Level of the NAAQSas Compared to 1992 | | | 6% | Data avail. 05 | 7 | 11 | Percent |
| Cumulative Percent Increase in the Number of Areas with Ambient PM-10 Concentrations Below the Level of the NAAQSas Compared to 1992 | | | 50% | Data avail. 05 | 50 | 130 | Percent |
| Total number of people who live in areas measuring clean air for PM-10 | | | | | | 126,400,000 | People |
| Areas measuring clean air for PM-10 | | | | | | 38 | Areas |
| Additional people living in new areas measuring clean air for PM-10 | | | | | | 5,500,000 | People |
| Total Number of People who Live in Areas Designated in Attainment with Clean Air Standards for PM | 3,438,000 | 6,086,500 | 6,200,000 | 120,700,000 | 122,308,000 | | People |
| Areas Designated to Attainment for the PM-10 Standard | 8 | 4 | 3 | 6 | 4 | | Areas |
| Additional People Living in Newly Designated Areas with Demonstrated Attainment of the PM Standard | 2,249,000 | 2,686,500 | 228,000 | 126,000 | 1,549,648 | | People |
| PM-10 Reduced from Mobile Sources | 22,000 | 23,000 | 25,000 | 18,000 | 62,161 | 74,594 | Tons |
| PM-2.5 Reduced from Mobile Sources | 16,500 | 17,250 | 18,000 | 13,500 | 61,217 | | Tons |

Baseline: The 1992 baseline for population is the population in areas not classified or designated as attainment for the clean air national ambient air quality standards. The 1992 baseline for areas is those areas that are designated as non-attainment of the NAAQs but not meeting the standard (50 areas). Through FY 2003, 120,279,036 are living in

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areas designated to attainment; 5 areas are designated to attainment for this/these pollutants. The 1995 baseline for PM-10 reduced from mobile sources is 880,000 tons. Beginning in FY 2005, the 2000 Mobile6 inventory is used as the baseline for mobile source emissions. The 2000 baseline for PM-10 from mobile source is 613,000 tons.

Reduce Exposure to Unhealthy CO, SO2, NO2, Lead

- In 2006 The number of people living in areas with monitored ambient CO, NO2, SO2, or Pb concentrations below the NAAQS will increase by less than 13% (relative to 2005) for a cumulative total of 66% (relative to 1992).
- In 2005 The number of people living in areas with monitored ambient CO, NO2, SO2, or Pb concentrations below the NAAQS will increase by less than 1% (relative to 2004) for a cumulative total of 53% (relative to 1992).
- In 2004 Based on available data, EPA is not on track to meet its goal. EPA maintained healthy air quality for 173M people living in 122 monitored areas attaining the CO, SO2, NO2 or Pb standards falling slightly short of its goal of 174M.
- In 2003 Maintained healthy air quality for 53 million people living in monitored areas attaining the CO, SO2, NO2, and Lead standards; increased by .74 million the number of people living in areas with healthy air quality that have newly attained the standard.
- In 2002 Maintained healthy air quality for 36.7 million people living in monitored areas attaining the CO, SO2, NO2, and Lead standards; and increased by 16.5 million, the number of people living in areas with healthy air quality that have newly attained the standard.
- In 2001 EPA maintained healthy air quality for 36.3 million people living in 56 areas attaining the CO, SO2, NO2, and Lead standards and increased by 418,000 the number of people living in areas with healthy air quality that have newly attained the standard.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | Percent |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Cumulative Percent Increase in the Number of People who Live in Areas with Ambient CO, SO2, NO2, or Pb Concentrations Below the Level of the NAAQS as Compared to 1992 | | | | Data avail 05 | 53 | 66 | |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Cumulative Percent Increase in the Number of Areas with Ambient CO, SO ₂ , NO ₂ , or Pb Concentrations Below the Level of the NAAQS as Compared to 1992 | | | | Data avail. 05 | 77 | 111 | Percent |
| Total number of people who live in areas measuring clean air for CO, SO ₂ , NO ₂ , or Pb. | | | | | | 189.7 | People |
| Areas measuring clean air for CO,SO ₂ ,NO ₂ or Pb | | | | | | 4 | Areas |
| Additional people living in new areas measuring clean air for CO, SO ₂ ,NO ₂ , or Pb | | | | | | 15,500,000 | People |
| Total Number of People Living in Areas Designated in Attainment with Clean Air Standards for CO, SO ₂ , NO ₂ , and Pb | 36,721,000 | 53,190,000 | 53,700,000 | 173,300,000 | 174,222,000 | 0 | People |
| Areas Designated to Attainment for the CO, SO ₂ , NO ₂ , and Pb Standards | 9 | 12 | | 14 | 8 | | Areas |
| Additional People Living in Newly Designated Areas with Demonstrated Attainment of the CO, SO ₂ , NO ₂ , and Pb Standards | 418,000 | 16,490,000 | 740,000 | 5,400,000 | 209,991 | | People |
| CO Reduced from Mobile Sources | 10,672,000 | 11,002,000 | | 12,636,000 | -841,971 | -1.01 M | Tons |
| Total Number of People Living in Areas with Demonstrated Attainment of the NO ₂ Standard | 14,944,000 | 14,944,000 | | | n/a | | People |

Baseline: The 1992 baseline for population is the population in areas not classified or designated as attainment for the clean air national ambient air quality standards. The 1992 baseline for areas is those areas that are designated as non-attainment of the NAAQS but not meeting the standard (119 areas). Through FY 2003, 167 million people are living in areas designated to attainment: 108 areas are designated to attainment for this/these pollutants. The 1995 baseline for mobile source CO emissions was 70.9M tons. Beginning in FY 2005, the 2000 Mobile6 inventory is used as the baseline for mobile source emission. The 2000 baseline was 79.2M tons for mobile source CO emissions. While on-road CO emissions continue to decrease, there is an overall increase in mobile source CO

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emissions due to a growth in nonroad CO.

Reduce Exposure to Unhealthy Ozone Levels - 8 Hour

- In 2006 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 8-hour ozone standard will increase by 1% (relative to 2004) for a cumulative total of 7% (relative to 2001).
- In 2005 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 8-hour ozone standard will increase by 4% (relative to 2004) for a cumulative total of 7% (relative to 2001).
- In 2004 EPA designated the attainment status in FY 2004 for areas meeting the 8-hour ozone standard, thereby establishing the baseline to monitor progress.
- In 2003 EPA met its goal of approximately 834,400 additional people living in healthier residential indoor environments, based on information from the Indoor Environment Partner Network, which includes traditional partners and grantees; analysis of various results data efforts including public service announcements and outreach, and information from the National Association of Home Builders and radon mitigation fan sales.
- In 2002 EPA met its goal of approximately 834,400 additional people living in healthier residential indoor environments, based on information gathered from homebuilders and manufacturers outreach.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Cumulative Percent Increase in the Number of People who Live in Areas with Ambient 8-hour Concentrations Below the Level of the NAAQS as Compared to 2001 | | 834,400 | 834,400 | Data avail 05 | <1 | <1 | Percent |
| Cumulative Percent Increase in the Number of Areas with Ambient 8-hour Ozone Concentrations Below the Level of the NAAQS as Compared to 2001 | | | | Data Avail 05 | <1 | <1 | Percent |
| VOCs Reduced from Mobile Sources | | | | | | 1.03 M | Tons |
| NOx Reduced from Mobile Sources | | | | | | 2.03 M | Tons |

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Baseline: EPA will designate the attainment status for areas in April 2004. With that data, we will have the population baseline as well as the number of areas that are not in attainment for the 8-hour ozone standard. The 1995 baseline was 8.1M tons for mobile source VOC emissions, and 12.0M tons for mobile source NOx emissions. Beginning in FY 2005, the Mobile6 inventory is used as the baseline year for mobile source emissions. The 2000 baseline was 7.7M tons for mobile source VOC emissions, and 11.8M tons for mobile source NOx emissions. The 1-hour ozone standard is in the process of being phased out and revoked.

Reduce Exposure to Unhealthy Ozone Levels - 1 Hour

- In 2005 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 1-hour ozone standard will increase by 4% (relative to 2004) for a cumulative total of 53% (relative to 1992).

- In 2004 EPA is not on track to meet this goal based on available data. EPA maintained healthy air quality for 165.4 million people living in 53 areas designated as attaining the 1-hour ozone standard (falling short of its goal by 1.9 M people) and certified that 3 out of a target of 5 of the remaining 48 non-attainment areas have attained the 1-hour NAAQS for ozone, thereby increasing the number of people living in areas with healthy air by 3.9M in lieu of the 5.8M target.

- In 2003 Maintained healthy air quality for approx. 41.7 million people living in monitored areas attaining the ozone std; certified that 5 areas of the remaining 54 nonattainment areas have attained the 1-hour NAAQS for ozone thus increasing the no. of people living in areas with healthy air by 5.8 million.

- In 2002 Maintained healthy air quality for 41.7 million people living in monitored areas attaining the ozone standard; and certified 1 area of the remaining 55 nonattainment areas attained the 1-hour NAAQS for ozone, thus increasing the number of people living in areas with healthy air by 326,000.

- In 2001 EPA maintained healthy air quality for 38.2 million people living in 43 areas attaining the ozone standard, increased by 3.5 million the number of people living in areas with healthy air quality that have newly attained the standard by certifying that 3 new areas have attained the 1-hour standard.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 |
|--|---------|---------|---------|------------|------------|---------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request |
| Cumulative Percent Increase in the Number of | | | 42% | Data Avail | 53 | Percent |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| People who Live in Areas with Ambient 1-hour Ozone Concentrations Below the Level of the NAAQS as Compared to 1992 | | | | 05 | | | |
| Cumulative Percent Increase in the Number of Areas with Ambient 1-hour Ozone Concentrations Below the Level of the NAAQS as Compared to 1992 | | | Data Lag | Data avail 05 | 40 | | Percent |
| Total Number of People who Live in Areas Designated to Attainment of the Clean Air Standards for Ozone | 41,679,000 | 42,026,000 | | 173.30 | 174,562,000 | | People |
| Areas Designated to Attainment for the Ozone Standard | 3 | 1 | | 3 | 6 | | Areas |
| Additional People Living in Newly Designated Areas with Demonstrated Attainment of the Ozone Standard | 3,475,000 | 326,000 | | 3,900,000 | 7,276,790 | | People |
| VOCs Reduced from Mobile Sources | 1,659,000 | 1,755,000 | 1,900,000 | 2,040,000 | 855,624 | | Tons |
| NOx Reduced from Mobile Sources | 1,189,000 | 1,319,000 | 1,400,000 | 1,653,000. | 1,693,259 | | Tons |

Baseline: The 1992 baseline for population is the population in areas not classified or designated as attainment for the clean air national ambient air quality standards. The 1992 baseline for areas is those areas that are designated as non-attainment of the NAAQs but meeting the standard (54 areas). Through FY 2003, 161.5 M are living in areas designated to attainment; 51 areas are designated to attainment for this/these pollutants. The 1995 baseline was 8.1M tons for mobile source VOC emissions, and 12.0M tons for mobile source NOX emissions. Beginning in FY 2005, the Mobile6 inventory is used as the baseline year for mobile source emissions. The 2000 baseline was 7.7M tons for mobile source VOC emissions, and 11.8M tons for mobile source NOx emissions. The 1-hour ozone standard will be revoked in FY 2005 due to the designation of all areas with respect to the 8-hour ozone standard.

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Reduce Exposure to Unhealthy PM Levels - PM- 2.5

- In 2006 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-2.5 standard will increase by 1% (relative to 2005) for a cumulative total of less than 1% (relative to 2001).
- In 2005 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-2.5 standard will increase by 1% (relative to 2003) for a cumulative total of less than 1% (relative to 2001).
- In 2004 EPA designated attainment status for PM2.5 in December.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Cumulative Percent Increase in the Number of People who Live in Areas with Ambient PM-2.5 Concentrations Below the Level of the NAAQS as Compared to 2001 | | | | Data avail. 05 | 1 | <1 | Percent |
| Percent Increase in the Number of Areas with Ambient PM-2.5 Concentrations Below the Level of the NAAQS as Compared to 2001 | | | | Data avail. 05 | 1 | <1 | Percent |
| PM-2.5 Reduced from Mobile Sources | | | | | | 73,460 | Tons |

Baseline: EPA will designate the attainment status for areas in FY 2005. With that data, we will have the population baseline as well as the number of areas that are not in attainment for the PM-2.5 standard. Beginning in FY 2005, the 2000 Mobile6 inventory is used as the baseline for mobile source emissions. The 2000 baseline for PM 2.5 from mobile sources is 613,000 tons.

Acid Rain

- In 2006 Reduce total annual average nitrogen deposition and ambient nitrate concentrations 5% from baseline. Baseline for annual targets up through 2010 is 1990 monitored levels.
- In 2006 Reduce total annual average sulfur deposition and ambient sulfate concentrations 27% from baseline. Baseline for annual targets up through 2010 is 1990 monitored levels.

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- In 2005 Reduce total annual average nitrogen deposition and ambient nitrate concentrations 5% from baseline. Baseline for annual targets up through 2010 is 1990 monitored levels.

- In 2005 Reduce total annual average sulfur deposition and ambient sulfate concentrations 27% from baseline. Baseline for annual targets up through 2010 is 1990 monitored levels.

- In 2004 The new Acid Rain measure was developed as a result of the OMB PART analysis of the program in FY 2005 budget process. Reduce total annual average nitrogen deposition and ambient nitrate concentrations 5% from baseline. Baseline for annual targets up through 2010 is 1990 monitored levels.

- In 2004 The new annual Acid Rain measure was developed as a result of the OMB PART analysis of the program in FY 2005. Reduce total annual average sulfur deposition and ambient sulfate concentrations 27% from baseline. Baseline for annual targets up through 2010 is 1990 monitored levels.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|-------------------|------------|---------|------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Total annual average nitrogen deposition and mean ambient nirtate concentrations reduced. | | | | Data avail. 05 | 5 | 5 | Percentage |
| Total annual average sulfur deposition and mean ambient sulfate concentrations reduced. | | | | Data avail. 05 | 27 | 27 | Percentage |

Baseline: Sulfur and nitrogen deposition contribute to acidification of lakes and streams, making them unable to support fish and other aquatic life. Reductions in both total sulfur and nitrogen deposition are critical to reducing the number of chronically acidic water bodies. Ambient sulfate and ambient nitrate ("acid rain" particulate") contributes to unhealthy air and respiratory problems in humans, especially children and other sensitive populations. The baseline is established from monitored site levels based on consolidated map of 1989-1991 showing a three year of deposition levels produced from the CASTNET sites (<http://www.epa.gov/castnet/sites.html>).

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OBJECTIVE: HEALTHIER INDOOR AIR

By 2008, 22.6 million more Americans than in 1994 will be experiencing healthier indoor air in homes, schools, and office buildings.

Healthier Residential Indoor Air

- In 2006 850,000 additional people will be living in homes with healthier indoor air.
- In 2005 843,300 additional people will be living in homes with healthier indoor air.
- In 2004 EPA is currently analyzing the information gathered through the survey instrument.
- In 2003 End-of-year FY 2003 data will be available in late 2004 to verify that 834,400 additional people were living in healthier residential indoor environments.
- In 2002 On track to ensure that 834,400 additional people will be living in healthier residential indoor environments.
- In 2001 An additional 890,000 additional people are living in healthier residential indoor environments.

| | | | | | | | |
|---------------------------------------|---------|----------|----------|-------------------|------------|---------|--------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| People Living in Healthier Indoor Air | 890,000 | Data Lag | Data Lag | Data avail. 05 | 843,300 | 850,000 | People |

Baseline: This performance measure includes EPA radon, ETS, and asthma work. 1. By 2006, increase the number of people living in homes built with radon reducing features to 4,785,612 from 1,826,280 in 1994 (cumulative). * 2. By 2006, decrease the number of children exposed to secondhand smoke from 7.4 million (27% of children ages 6 and under) in 1994 to an estimated 4.0 million (14.5% of children ages 6 and under) (cumulative). 3. By 2006, increase by 500,000 the number of people with asthma and their caregivers who are educated about indoor air asthma triggers.

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Healthier Indoor Air in Schools

- In 2006 630,000 students, faculty and staff will experience improved indoor air quality (IAQ) in their schools.
- In 2005 1,312,500 students, faculty and staff will experience improved indoor air quality in their schools.
- In 2004 The Agency expects to meet its goal by reaching 3000 schools with an average of approximately 525 students/staff per school in adopting an indoor air quality management plans.
- In 2003 Based on review and analysis of partner/grantees' reports and consulting with partners of EPA's Indoor Environment Network, EPA is confident that more than 1 million students and staff are experiencing improved IAQ in schools.
- In 2002 Based on information gathered from a number of schools and school systems/districts that receive Tools for Schools kits, EPA met the goal of improved air quality for approximately an additional 1.2 million students, faculty, and staff.
- In 2001 An additional 1,930,000 students, faculty and staff are experiencing improved indoor air quality in their schools.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|-----------|-----------|-----------|----------------|------------|---------|----------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Students/Staff Experiencing Improved IAQ in Schools | 1,930,000 | 1,200,000 | 1,050,000 | Data avail. 05 | 1,312,500 | 630,000 | Students/Staff |

Baseline: The nation has approximately 117,000* schools with an average of 525 students, faculty, and staff for a total baseline population of 61,425,000. The IAQ "Tools for Schools" Guidance implementation began in 1997. For FY 2006, the program projects an additional 1200 schools will implement the guidance. Results from a 2002 IAQ practices in schools survey suggest that approximately 20% of U.S. schools report an adequate IAQ management plan that is in accordance with EPA guidelines.

Healthier Indoor Air in Workplaces

- In 2006 240,000 additional office workers will experience improved air quality in their workplaces.

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In 2005 150,000 additional office workers will experience improved air quality in their workplaces.

| | | | | | | | |
|---|---------|---------|---------|---------|------------|---------|--------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Additional office workers will experience improved air quality in their workplaces. | | | | | 150,000 | 240,000 | People |

Baseline: There are approximately 750,000 office buildings with 12 billion square feet. There are approximately 24 million office workers with the mean worker density at 1 office worker per 500 square feet. Our 2008 goal is to get an additional 3% of all office buildings to adopt good IAQ measures translating to 720,000 office workers.

OBJECTIVE: PROTECT THE OZONE LAYER

By 2010, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and the risk to human health from overexposure to ultraviolet (UV) radiation, particularly among susceptible subpopulations, such as children, will be reduced.

Restrict Domestic Consumption of Class II HCFCs

In 2006 Restrict domestic annual consumption of class II HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

In 2005 Restrict domestic annual consumption of class II HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

In 2004 Progress on restricting domestic exempted consumption of Class I CFCs and halons is tracked by monitoring industry reports of compliance with EPA's CAA phase out regulations and US obligations under the Montreal Protocol.

In 2003 End of year FY 2003 data will be available in late 2004 to verify restriction of domestic consumption of class II

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HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restriction of domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

In 2002 On track to restrict domestic consumption of class II HCFCs below 15,240 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 60,000 ODP MTs.

In 2001 Restricted domestic consumption of class II HCFCs below 15,240 ODP-weighted metric tonnes (ODP MTs) and restricted domestic exempted production and import of newly produced class I CFCs and halons below 60,000 ODP MTs.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Domestic Consumption of Class II HCFCs | 12,087 | On Track | Data Lag | Data avail. 05 | <9,906 | <9,906 | ODP MTs |
| Domestic Exempted Production and Import of Newly Produced Class I CFC s and Halons | 3,062 | On Track | Data Lag | Data avail. 05 | <10,000 | <10,000 | ODP MTs |

Baseline: The base of comparison for assessing progress on the 2005 annual performance goal is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each Ozone Depleting Substance (ODS) is weighted based on the damage it does to the stratospheric ozone - this is its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus import minus export.

OBJECTIVE: RADIATION

Through 2008, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.

Ensure WIPP Safety

In 2006 Certify that 45,000 55-gallon drums of radioactive waste (containing approximately 135,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.

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- In 2005 Certify that 40,000 55-gallon drums of radioactive waste (containing approximately 120,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.
- In 2004 Through FY 2004, EPA has certified as properly disposed approximately 109,000 drums of transuranic waste equivalent to approximately 321,000 millicuries.
- In 2003 36,041 drums (55 gallon) of radioactive waste shipped by DOE to the Waste Isolation Pilot Plant were permanently disposed of safely and according to EPA standards.
- In 2002 EPA certified that 22,800 55 gallon drums of radioactive waste (containing approximately 68,400 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|-------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Number of 55-Gallon Drums of Radioactive Waste Disposed of According to EPA Standards | | 22,800 | 36,041 | 36,500 | 40,000 | 45,000 | Drums |

Baseline: The Waste Isolation Pilot Plant (WIPP) near Carlsbad, NM was opened in May 1999 to accept radioactive transuranic waste. By the end of FY 2004, approximately 109,000 (cumulative) 55 gallon drums will be safely disposed. In FY 2006, EPA expects that DOE will ship an additional 45,000 55- gallon drums of waste. Through FY 2006, EPA expects that DOE will shipped safely and according to EPA standards, approximately 23% of the planned waste volume, based on disposal of 860,000 drums over the next 40 years. Number of drums shipped to the WIPP facility on an annual basis is dependent on DOE priorities and funding. EPA volume estimates are based on projecting the average shipment volumes over 40 years with an initial start up.

Build National Radiation Monitoring System

- In 2006 EPA will purchase 51 additional state of the art monitoring units and initiate deployment to sites selected based on population and geographical coverage.
- In 2005 EPA will purchase 60 additional state of the art monitoring units and initiate deployment to sites selected based on population and geographical coverage. All old sampling will be replaced and population coverage will be

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expanded to 60%.

In 2004 EPA did not meet its FY 2004 target of purchasing and deploying 60 state of the art radiation monitoring units.

| | | | | | | | |
|---|---------|---------|---------|---------|------------|---------|-----------------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Purchase and Deploy State-of-the Art Monitoring Units | | | | 0 | 60 | 51 | Units Purchased |

Baseline: The current fixed monitoring system, part of the Environment Radiation Ambient Monitoring System, was developed in the 1960s for the purpose of monitoring radioactive fallout from nuclear weapons testing. The system currently consists of 52 old low-tech air particulate samplers which provide coverage in cities which represent approximately 24% of the population. The current system air samplers will be retired from service due to age. As the system comes on line, EPA's schedule for estimated monitor deployment and population coverage is as follows: FY 2005: 11 monitors deployed - 22.8%; FY 2006; 71 monitors deployed- for population coverage of approximately 67.7%; FY 2009: 172 cumulative monitors deployed - for population coverage of approximately 69.4%. The purchase schedule is based primarily upon contract pricing terms and the deployment schedule reflects a best estimate of our ability to get the monitors sited and out in the field.

Homeland Security - Readiness & Response

In 2006 Verify that 60 percent of EPA's Radiological Emergency Response Team (RERT) members meet scenario-based response criteria.

In 2005 Verify that 50 percent of EPA's Radiological Emergency Response Team (RERT) members meet scenario-based response criteria.

| | | | | | | | |
|--|---------|---------|---------|---------|------------|---------|---------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Percentage of EPA RERT members that meet scenario-based criteria | | | | | 50 | 60 | Percent |

Baseline: EPA assesses RERT readiness based on the ability of the RERT to: 1. provide effective field response, as defined today, 2. support coordination centers; and 3. provide analytical capabilities throughout as needed to support a

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single small-to-medium scale incident. These evaluation criteria will be reevaluated and revised in response to the Department of Homeland Security development of criteria for the Nuclear Incident Response Team established under the Homeland Security Act of 2002, which includes EPA RERT assets.

OBJECTIVE: REDUCE GREENHOUSE GAS INTENSITY

Through EPA's voluntary climate protection programs, contribute 45 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas intensity improvement goal by 2012. (An additional 75 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for greenhouse gas intensity improvement.)

Reduce Greenhouse Gas Emissions

- | | |
|---------|---|
| In 2006 | Greenhouse gas emissions will be reduced from projected levels by approximately 102 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations. |
| In 2005 | Greenhouse gas emissions will be reduced from projected levels by approximately 90 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations. |
| In 2004 | Data will be available in FY 2005. |
| In 2003 | EPA met its goal for its Climate Change Programs by GHG emissions by 82.4 MMTCE. |
| In 2002 | EPA's Climate Change programs reduced GHG emissions by 71 MMTCE in 2002 which is the equivalent of eliminating emissions from more than 28 million cars. |
| In 2001 | EPA's Climate Protection Programs reduced greenhouse gas emissions by 65 million metric tons of carbon equivalent in 2001. EPA estimates that due to investments already made through EPA's technology deployment programs, greenhouse gas emissions will be reduced by more than 500 MMTCE through 2012. |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-------|
| Annual Greenhouse Gas Reductions - All EPA Programs | 65 | 71,000,000 | 82,400,000 | | 90.2 | 102 | MMTCE |
| Greenhouse Gas Reductions from EPA's Buildings Sector Programs (ENERGY STAR) | 16.6 | 19,600,000 | 23,000,000 | | 23.8 | 26.5 | MMTCE |
| Greenhouse Gas Reductions from EPA's Industrial Efficiency/Waste Management Programs | 5.8 | 6,900,000 | 7,400,000 | | 8 | 9.0 | MMTCE |
| Greenhouse Gas Reductions from EPA's Industrial Methane Outreach Programs | 16 | 15,900,000 | 17,900,000 | | 19.1 | 20.1 | MMTCE |
| Greenhouse Gas Reductions from EPA's Industrial HFC/PFC Programs | 22.8 | 24,500,000 | 29,800,000 | | 34.4 | 41.0 | MMTCE |
| Greenhouse Gas Reductions from EPA's Transportation Programs | 1.9 | 2,100,000 | 2,300,000 | | 2.9 | 3.3 | MMTCE |
| Greenhouse Gas Reductions from EPA's State and Local Programs | 1.9 | 2,000,000 | 2,000,000 | | 2.0 | 2.0 | MMTCE |

Baseline: The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide (CO₂) emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002 (www.epa.gov/globalwarming/publications/car/index.html), which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the estimates. EPA develops the non-CO₂ emissions baselines and projections using information from partners and other sources. EPA continues to develop annual inventories as well as update

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methodologies as new information becomes available.

Reduce Energy Consumption

- In 2006 Reduce energy consumption from projected levels by more than 145 billion kilowatt hours (kWh), contributing to over \$8.5 billion in energy savings to consumers and businesses.

- In 2005 Reduce energy consumption from projected levels by more than 120 billion kilowatt hours, contributing to over \$8.5 billion in energy savings to consumers and businesses.

- In 2004 Data will be available in 2005.

- In 2003 EPA's Climate Change Programs significantly exceeded its goal by reducing energy use by 122.8 billion kWh. EPA estimates that from investments made due to EPA's technology deployment programs, businesses and consumers will realize energy bill savings of more than \$85 billion through 2012 (net of investment in energy-efficiency technologies).

- In 2002 EPA's Climate Change Programs reduced energy use by 100 billion kWh hours. EPA estimates that from investments made due to EPA's technology deployment programs, businesses and consumers will realize energy bill savings of more than \$70 billion through 2012 (net of investment in energy- efficient technologies).

- In 2001 EPA's Climate Protection Programs reduced energy use by 84 billion kilowatt hours in 2001.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|--|---------|---------|---------|-----------|------------|---------|-------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Annual Energy Savings - All EPA Programs | 84 | 100 B | 122.8 B | Data | 120 | 145 | Billion kWh |
| | | kWh | kWh | avail. 05 | | | |

Baseline: The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide (CO2) emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002

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(www.epa.gov/globalwarming/publications/car/index.html), which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the estimates. EPA develops the non-CO2 emissions baselines and projections using information from partners and other sources. EPA continues to develop annual inventories as well as update methodologies as new information becomes available.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2010, provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.

Clean Automotive Technology

- In 2006 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requirements of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 35% over the baseline.
- In 2005 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requirements of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 30% over the baseline.
- In 2004 The average fuel economy of the typical SUV with EPA-developed hybrid technology represents a 25% increase over the baseline of 20.2 mpg.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|---------------|---------|-----|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Fuel Economy of typical SUV with EPA-developed hybrid technology over EPA Driving Cycles Tested | | | | 25.20 | 26.3 | 27.3 | MPG |

Baseline: The average fuel economy of all SUVs sold in the US in 2001 is 20.2 mpg. Values for 2004, 2005, and 2006 represent 25%, 30%, and 35% improvements over this baseline, respectively.

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Research

PM Effects Research

In 2006 BY 2006, develop and report on new data on the effects of different PM sizes or components to improve understanding of the health risks associated with short-term exposure to PM in healthy and select susceptible populations so that, by 2010, OAR has improved assessments of health risks to develop PM standards that maximize protection of human health, as determined by independent expert review.

| | | | | | | | |
|---|---------|---------|---------|---------|------------|---------|--------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Integrated report on the health effects of different particle sizes or particle components in healthy and select susceptible subgroups. | | | | | | 1 | Report |

Background: The physical attributes of PM -- size, surface area and number -- influence PM deposition, penetration, and persistence in the lung, as well as the potential for transport within the body and the inherent toxicity of the particle itself. Composition also varies by particle size, with products of combustion usually concentrated in fine PM. Evidence from epidemiological studies suggest that small or "fine" particles (PM with diameters less than 2.5 microns, or PM2.5) are strongly associated with cardiovascular and respiratory effects. Other studies have shown that larger, "coarse" particles (PM with diameters less than 10 microns, or PM10) may not contribute significantly to an increased risk of adverse health effects. In addition, a few studies show correlations between health outcomes and ultrafine (< 100 nm) ambient PM. EPA is conducting research to determine the extent to which adverse health effects can be attributed to PM belonging to a particular size class or chemical composition of PM. This APG will report on and integrate information on the influence of particle size and certain compositions on health effects in healthy and select susceptible subgroups. Specific emphasis will be placed on differential effects - in kind or intensity - for less studied particle sizes (i.e. ultrafines and coarse particles). This information will reduce uncertainties in risk assessment, be used in the development of future PM standards, and inform decision makers implementing PM reduction strategies.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, and will determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their

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progress under the Government Performance and Results Act.

PM Measurement Research

In 2006 Develop and transfer new data and tools needed by OAR and the states to predict, measure, and reduce ambient PM and PM emissions to attain the existing PM NAAQS, as determined by independent expert review.

In 2005 By FY 2005, deliver and transfer improved receptor models and data on chemical compounds emitted from sources so that, by 2006, EPA's Office of Air and Radiation and the states have the necessary new data and tools to predict, measure, and reduce ambient PM and PM emissions to attain the existing PM National Ambient Air Quality Standards (NAAQS) for the protection of public health.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|-------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Improved receptor models and data on chemical compounds emitted from sources | | | | | 09/30/05 | | models/data |
| Synthesis report with improved information on PM emissions and ambient concentrations for use in preparation and evaluation of state implementation plan development, application, and compliance | | | | | | 1 | Report |

Background: The designation of non-attainment areas for the Particulate Matter National Ambient Air Quality Standards (NAAQS) in 2005 will mean that states will need to immediately begin developing State Implementation Plans (SIPs). SIPs incorporate source emission reduction rules that once implemented lead to cleaner air and standards attainment. They are due to EPA three years after designation. SIP development is predicated on the availability of recent and credible information on state-wide and regional air quality, atmospheric chemistry, and processes that transport and transform source emissions leading to PM concentrations in excess of the PM NAAQS. The national PM Supersites program has been applying the most sophisticated instruments and methods available over the past four years in seven areas across the country to fully characterize PM, its composition and contributing sources and atmospheric processes. Supersites have been located in Fresno, CA; Los Angeles, CA; Houston, TX; St. Louis, MO; Baltimore, MD; Pittsburgh, PA; and New York, NY. These locations include those with the highest annual and daily PM concentrations nationally. The observational insights from these Supersites will provide specialized information not otherwise available for their host and adjoining states. Information will be provided both as detailed area-specific information and as synthesis of findings on multiple scales. This

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information will provide inputs for receptor models, and confirm the emissions and chemical process information used in air quality models as part of a weight of evidence approach to be used by states to tag specific sources with reduction targets.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, and will determine whether EPA has been successful in meeting its annual and long-term commitments for research.

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Clean and Safe Water

Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

OBJECTIVE: PROTECT HUMAN HEALTH

Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.

Safe Drinking Water

- In 2006 75% of community water systems will provide drinking water that meets health-based standards with a compliance date of January 2002 or later.
- In 2006 75% of the population served by community water systems will receive drinking water that meets health-based standards with a compliance date of January 2002 or later.
- In 2006 90% of the population served by community water systems in Indian country will receive drinking water that meets all applicable health-based drinking water standards.
- In 2006 93% of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.
- In 2006 94% of community water systems will provide drinking water that meets health-based standards with which systems need to comply as of December 2001.
- In 2006 94% of the population served by community water systems will receive drinking water that meets health-based standards with which systems need to comply as of December 2001.
- In 2005 75% of community water systems will provide drinking water that meets health-based standards with a compliance date of January 2002 or later.
- In 2005 75% of the population served by community water systems will receive drinking water that meets health-based standards with a compliance date of January 2002 or later.

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- In 2005 90% of the population served by community water systems in Indian country will receive drinking water that meets all applicable health-based drinking water standards.
- In 2005 93% of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.
- In 2005 94% of community water systems will provide drinking water that meets health-based standards with which systems need to comply as of December 2001.
- In 2005 94% of the population served by community water systems will receive drinking water that meets health-based standards with which systems need to comply as of December 2001.
- In 2004 Data available in 2005.
- In 2004 Data available in 2005.
- In 2003 96% of the population served by community water systems received drinking water meeting health-based standards promulgated in or after 1998.
- In 2003 90% of the population served by community water systems received drinking water meeting all health-based standards in effect as of 1994, up from 83% in 1994.
- In 2002 94% of the population served by community water systems received drinking water meeting all health-based standards in effect as of 1994.
- In 2001 91 percent of the population served by water systems received drinking water meeting all health-based standards that were in effect as of 1994.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|-------------------|------------|---------|--------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Percent of population served by community drinking water systems with no violations during the year of any Federally enforceable health-based standards that were in place by 1994. | 91 | 94 | 90 | Available 2005 | | | % Population |
| Population served by community water systems providing drinking water meeting health-based | | | 96 | Available 2005 | | | % Population |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|--------------|
| standards promulgated in or after 1998. | | | | | | | |
| Population served by community water systems that receive drinking water that meets health-based standards with which systems need to comply as of December 2001. | | | | | 94 | 94 | % Population |
| Population served by community water systems that receive drinking water that meets health-based standards with a compliance date of January 2002 or later. | | | | | 75 | 75 | % Population |
| Percentage of community water systems that provide drinking water that meets health-based standards with which systems need to comply as of December 2001. | | | | | 94 | 94 | % CWSs |
| Percentage of community water systems that provide drinking water that meets health-based standards with a compliance date of January 2002 or later. | | | | | 75 | 75 | % CWSs |
| Percent of the population served by community water systems in Indian country that receive drinking water that meets all applicable health-based drinking water standards. | | | | | 90 | 90 | % Population |
| % of population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection. | | | | | 93 | 93 | % population |

Baseline: In 1998, 85% of the population that was served by community water systems and 96% of the population served by non-community, non-transient drinking water systems received drinking water for which no violations of federally enforceable health standards had occurred during the year. Year-to-year performance is expected to change as new standards take effect. Covered standards include: Stage 1 disinfection by-products/interim enhanced surface water treatment rule/long-term enhanced surface water treatment rule/arsenic.

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Drinking Water Small Systems

In 2006 Reduce the number of households on Tribal lands lacking access to safe drinking water.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|--|---------|---------|---------|---------|------------|---------|------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Number of household on Tribal lands lacking access to safe drinking water. | | | | | | 30,800 | Households |

Baseline: 2003 Baseline: In 2003, Indian Health Service indicates that 39,000 homes lack access to safe drinking water (12% of tribal homes nationwide).

River/Lake Assessments for Fish Consumption

- In 2006 91% of the shellfish growing acres monitored by states are approved or conditionally approved for use.
- In 2006 At least 1% of the water miles/acres identified by states or tribes as having a fish consumption advisory in 2002 will have improved water and sediment quality so that increased consumption of fish and shellfish is allowed.
- In 2005 80% of the shellfish growing acres monitored by states are approved or conditionally approved for use.
- In 2005 At least 1% of the water miles/acres identified by states or tribes as having a fish consumption advisory in 2002 will have improved water and sediment quality so that increased consumption of fish and shellfish is allowed.
- In 2004 24%
- In 2003 Reduced consumption of contaminated fish by increasing the information available to States, Tribes, local governments, citizens, and decision-makers.
- In 2002 14% of the nation's river miles and 28% of nation's lake acres have been assessed to determine if they contain fish and shellfish that should not be eaten or should be eaten in only limited quantities.
- In 2001 9% of the nation's river miles and 23% of nation's lake acres have been assessed to determine if they contain fish and shellfish that should not be eaten or should be eaten in only limited quantities.

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------------|
| Lake acres assessed for the need for fish advisories and compilation of state-issued fish consumption advisory methodologies. (cumulative) | 23 | 28 | 33 | 35% | | | % Lake acres |
| River miles assessed for the need for fish consumption advisories & compilation of state-issued fish consumption advisory methodologies. (cumulative) | 9 | 14 % | 15 | 24% | | | % River miles |
| Percent of water miles/acres, identified by states or tribes as having fish consumption advisories in 2002, where increased consumption of fish is allowed. | | | | | 1 | 1 | % Miles/Acres |
| Percent of the shellfish growing acres monitored by states that are approved or conditionally approved for use | | | | | 80 | 91 (FY 08) | % Areas |

Baseline: In 1999, 7% of the Nation's rivers and 15% of the Nation's lakes were assessed to determine if they contained fish that should not be eaten or should be eaten in only limited quantities. In September 1999, 25 states/tribes are monitoring and conducting assessments based on the national guidance to establish nationally consistent fish advisories. In the 2000 Report to Congress on the National Water Quality Inventory, 69% of assessed river and stream miles; 63% of assessed lake, reservoir, and pond acres; and 53% of assessed estuary square miles supported their designated use for fish consumption. For shell fish consumption, 77% of assessed estuary square miles met this designated use.

Increase Information on Beaches

- In 2006 Coastal and Great Lakes beaches monitored by State beach safety programs will be open and safe for swimming in over 94% of the days of the beach season.
- In 2006 Restore water quality to allow swimming in not less than 3% of the stream miles and lake acres identified by states in 2000 as having water quality unsafe for swimming.

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- In 2005 Coastal and Great Lakes beaches monitored by State beach safety programs will be open and safe for swimming in over 94% of the days of the beach season.
- In 2005 Restore water quality to allow swimming in not less than 2% of the stream miles and lake acres identified by states in 2000 as having water quality unsafe for swimming.
- In 2004 Beach closure data for calendar year 2003 was provided by 277 state agencies for 1,857 beaches. The goal to have closure data for 2,823 beaches was not met due to software compatibility issues with the old and new database systems. EPA expects the new system to be fully operational in early 2005 so all states can report beach closure information.
- In 2003 Reduced human exposure to contaminated recreation waters by increasing the information available to the public and decision-makers.
- In 2002 Reduced exposure to contaminated recreation waters by providing monitoring and closure data on 2,455 beaches to the public and decision-makers.
- In 2001 Reduce exposure to contaminated recreation waters by providing information on 2,354 beaches for which monitoring and closure data is available to the public and decision-makers.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------------|
| Beaches for which monitoring and closure data is available to the public at http://www.epa.gov/waterscience/beaches/ (cumulative) | 2,354 | 2,445 | 2,823 | 1,857 | | | Beaches |
| Restore water quality to allow swimming in stream miles and lake acres identified by states | | | | | 2 | 3 | % Miles/Acres |
| Days (of beach season) that coastal and Great Lakes beaches monitored by State beach safety programs are open and safe for swimming. | | | | | 94 | 94 | % Days/Season |

Baseline: By the end of FY 1999, 33 states had responded to EPA's first annual survey on state and local beach monitoring and closure practices and EPA made available to the public via the internet. An average of 9 recreational contact waterborne disease outbreaks reported per year by the Centers for Disease Control for the years 1994-1998, based

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on data housed in EPA/ORD internal database. In 2002, monitored beaches were opened 94% of the days during the beach season.

Source Water Protection

- In 2006 20% of source water areas for community water systems will achieve minimized risk to public health.
- In 2005 20% of source water areas for community water systems will achieve minimized risk to public health.
- In 2004 13,891 community water systems (representing 42% of the population served by these systems) implemented best management practices to address potential sources of contamination and further protect drinking water supplies.
- In 2003 6,570 community water systems (representing 25% of the population served by these systems) implemented source water protection programs.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------------|
| Number of community water systems and percent of population served by those CWSs that are implementing source water protection programs. | | | 6,570 / 25% | 13,891 / 42% | | | % pop/systems |
| Percent of source water areas for community water systems that achieve minimized risk to public health | | | | | 20 | 20 | % Areas |

Baseline: EPA defines "achieve minimized risk" as substantial implementation of source water protection actions, as determined by a State's source water protection strategy. Approximately 268 million people are estimated to be served by Community Water Systems (CWSs) in 2002.

OBJECTIVE: PROTECT WATER QUALITY

Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.

Watershed Protection

- In 2006 472 of the Nation's watersheds have water quality standards met in at least 80% of the assessed water segments.

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- In 2006 Water quality standards are fully attained in over 25% of miles/acres of waters by 2012, with an interim milestone of restoring 5% of these waters - identified in 2000 as not attaining standards - by 2005.
- In 2005 500 of the Nation’s watersheds have water quality standards met in at least 80% of the assessed water segments.
- In 2005 Water quality standards are fully attained in over 25% of miles/acres of waters by 2012, with an interim milestone of restoring 2% of these waters - identified in 2000 as not attaining standards - by 2005.
- In 2004 Available in 2005.
- In 2003 End of year FY 2003 data will be available in 2005 to verify if FY 2003, Water quality has improved on a watershed basis such that 600 of the Nation's 2,262 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.
- In 2002 This measure reflects states' biennial reporting under CWA 305(b), and is not intended to be reported against again until the FY2003 reporting cycle.
- In 2001 Water quality improved on a watershed basis such that 510 of the Nation's 2,262 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals (FY00) | FY 2003 Actuals | FY 2004 Actuals Available 2005. | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|------------------------------|--------------------|--|-----------------------|--------------------|------------------|
| Watersheds that have greater than 80% of assessed waters meeting all water quality standards. | 510 | 510 | 453 | Available 2005. | 500 | 472 | 8-digit HUCs |
| Waterbodies (river miles and lake acres) identified in 2000 as not attaining Water quality standards, are fully attained. | | | | | 2 | 5 | % Miles/Acres |

Baseline: As of 2002 state reports 453 watersheds had met the criteria that greater than 80% of assessed waters met all water quality standards. For a watershed to be counted toward this goal, at least 25% of the segments in the watershed must be assessed within the past 4 years consistent with assessment guidelines developed pursuant to section 305(b) of the Clean Water Act. In 2002, 0% of the 255,408 miles/and 6,803,419 acres of waters identified

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on 1998/2000 lists of impaired waters developed by States and approved by EPA under section 303(d) of the Clean Water Act.

Dredged Material/Ocean Disposal

- In 2006 Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for: coastal wetlands loss by at least 0.2 point; contamination of sediments in coastal waters by at least 0.7 point; benthic quality by at least 0.5 point; & eutrophic condition by at least 1.2 point
- In 2006 Scores for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved on the (good/fair/poor) scale of the National Coastal Condition Report by at least 0.1 point
- In 2005 Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for: coastal wetlands loss by at least 0.1 point; contamination of sediments in coastal waters by at least 0.1 point; benthic quality by at least 0.1 point; & eutrophic condition by at least 0.1 point
- In 2005 Scores for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved on the "good/fair/poor" scale of the National Coastal Condition Report by at least 0.1 point

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-------------|
| Score for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved (cumulative). | | | | | 2.5 | 2.7 | Scale score |
| Maintain water clarity and dissolved oxygen in coastal waters at the national levels reported in the 2002 National Coastal Condition Report | | | | | 4.3 / 4.5 | 4.3 / 4.6 | Scale score |
| Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for coastal wetlands loss | | | | | 1.5 | 1.7 | Scale score |
| Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for contamination of sediments in | | | | | 1.4 | 2.1 | Scale score |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-------------|
| coastal waters | | | | | | | |
| Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for benthic quality | | | | | 1.5 | 2.0 | Scale score |
| Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for eutrophic condition | | | | | 1.8 | 3.0 | Scale score |

Baseline: National rating of "fair/poor" or 2.4 where the rating is based on a 5-point system where 1 is poor and 5 is good and is expressed as an aerially weighted mean of regional scores using the National Coastal Condition Report indicators [i.e., water clarity, dissolved oxygen, coastal wetlands loss, eutrophic conditions, sediment contamination, benthic health, and fish tissue contamination]. The 2002 National Coastal Condition Report indicated 4.3 for water clarity and 4.5 for dissolved oxygen, 1.4 for coastal wetlands loss; 1.3 for contamination of sediments in coastal waters; 1.4 for benthic quality; & 1.7 for eutrophic condition.

State/Tribal Water Quality Standards

- In 2006 In coordination with other federal partners reduce, by 17%, households on tribal lands lacking access to basic sanitation.
- In 2006 Water quality in Indian country will be improved at not less than 50 monitoring stations in tribal waters for which baseline data are available (i.e., show at least a 10% improvement for each of four key parameters: total nitrogen, total phosphorus, dissolved oxygen, and fecal coliforms.)
- In 2005 In coordination with other federal partners reduce, by 11%, households on tribal lands lacking access to basic sanitation.
- In 2005 Water quality in Indian country will be improved at not less than 35 monitoring stations in tribal waters for which baseline data are available (i.e., show at least a 10% improvement for each of four key parameters: total nitrogen, total phosphorus, dissolved oxygen, and fecal coliforms.)

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- In 2004 25
- In 2003 Assured that States and Tribes had effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
- In 2002 Assure that 25 States and 22 Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
- In 2001 21 States and 19 Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------------|
| States with new or revised water quality standards that EPA has reviewed and approved or disapproved and promulgated federal replacement standards. | 21 | 25 | 28 | 27 | | | States |
| Tribes with water quality standards adopted and approved (cumulative). | 19 | 22 | 23 | 25 | | | Tribes |
| Number of monitoring stations (for which baseline data on 4 key parameters are available) where water quality is improved. | | | | | 35 | 50 | Stations |
| Number of households on tribal lands lacking access to basic sanitation. | | | | | 11 | 17 | % Households |

Baseline: The performance measure of state submissions (above) thus represents a "rolling annual total" of updated standards acted upon by EPA, and so are neither cumulative nor strictly incremental. EPA must review and approve or disapprove state revisions to water quality standards within 60-90 days after receiving the state's package. In 2002, there will be four key parameters available at 900 sampling stations in Indian country. In 2002, Indian Health Service indicates that 71,000 households on Tribal lands lack access to basic sanitation.

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OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Provide and apply a sound scientific foundation to EPA's goal of clean and safe water by conducting leading-edge research and developing a better understanding and characterization of the environmental outcomes under Goal 2.

Research

Scientific Rationale for Surface Water Criteria

In 2006 By 2006, provide demonstrations of bioassessment methods for Mid-Western U.S. rivers, so that, by 2010, the Office of Water, states, and tribes have approaches and methods to develop and apply criteria for habitat alteration, nutrients, suspended and bedded sediments, pathogens, and toxic chemicals that will support designated uses for aquatic ecosystems, as determined by independent expert review.

In 2005 By 2005, provide methods for developing water quality criteria so that, by 2008, approaches and methods are available to States and Tribes for their use in developing and applying criteria for habitat alteration, nutrients, suspended and bedded sediments, pathogens and toxic chemicals that will support designated uses for aquatic ecosystems and increase the scientific basis for listing and delisting impaired water bodies under Section 303(d) of the Clean Water Act.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|---------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Methods for developing water quality criteria based on population-level risks of multiple stressors to aquatic life and aquatic-dependent wildlife. | | | | | 09/30/05 | | methods |
| Report on bioassessment methods for a range of designated uses in freshwater systems within Mid-Western U.S. rivers | | | | | | 1 | Report |

Background: Under the Clean Water Act (CWA), the Office of Water is charged with setting criteria for states and tribes to use in establishing standards for identifying and restoring impaired waters and maintaining designated uses. Biological criteria have proven to be a more accurate way to measure ecological condition of waterbodies compared to traditional chemical and physical criteria. Bioassessment methods are used to develop and apply

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biocriteria. The historical focus of detection and monitoring has been on smaller, wadeable streams and rivers (where inputs are likely to have noticeable impacts), but the rise in awareness of the substantial role of non-point-source pollution has led to an increased interest in assessment of large rivers. Biological communities and habitats change with increasing stream size, so this research will provide river assessors with clear and consistent methods for conducting bioassessments for large rivers. Since different assessment methods use different scales of biological data (e.g., bioassays use species data and various bioassessments use community level data), this research will also compare the different levels of protection provided by different assessment methods. States and tribes are also faced with limited monitoring resources to meet their obligations for CWA 305b and 303d reporting and to meet Total Maximum Daily Load (TMDL) requirements. Until recently, the majority of state biomonitoring datasets were generated from targeted sampling designs and thus may have introduced a level of bias in some analyses. This research will provide states and tribes with guidance on balancing potential bias associated with the site selection approach with the monitoring objectives and the costs associated with a purely random sampling design. Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date.

Drinking Water Research

In 2006 By 2006, provide results of full-scale treatment demonstration projects and evaluations of other approaches for managing arsenic in drinking water, so that by 2010, the Office of Water, states, local authorities and utilities have scientifically sound data and approaches to manage risks to human health posed by exposure to arsenic, as determined by independent expert review.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|--|---------|---------|---------|---------|------------|---------|---------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Final reports of full-scale demonstrations of arsenic treatment technologies | | | | | | 3 | Reports |

Background: A final drinking water standard for arsenic of ten parts per billion (10 ppb) was established by EPA in 2001, with an effective date for compliance of 2006. Nearly 97 percent of the water systems affected by this rule are small systems that serve less than 10,000 people each. These small systems have limited resources and need more cost-effective technologies to meet the new standard. To assist small communities, EPA has conducted a series of full-scale, long-term, on-site demonstrations of arsenic removal technologies, process modifications and engineering approaches. In addition, EPA has provided technical assistance and training to operators of small

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water treatment systems. Accomplishment of the FY 2006 APG will provide states, local authorities, and utilities across the country with cost-effective technologies and technical information that can be used to successfully implement the new arsenic standard.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, and will determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).

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Land Preservation and Restoration

Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.

OBJECTIVE: PRESERVE LAND

By 2008, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.

Municipal Solid Waste Source Reduction

- | | |
|---------|---|
| In 2006 | Divert 33.4% (80 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day. |
| In 2005 | Divert an additional 1% (for a cumulative total of 35% or 81 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day. |
| In 2004 | End of year 2004 data will be available in 2006 to verify diversion of 33.4% (80 million tons) of municipal solid waste from land filling and combustion, and maintain the national average municipal solid waste generation rate at no more than 4.5 pounds per person per day. |
| In 2003 | End of year FY 2003 data will be available in 2006 to verify that an additional 1% (for a cumulative total of 32% or 74 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day was diverted. |
| In 2002 | FY 2002 data is currently not available for the diversion of municipal solid waste from land filling and combustion or maintaining per capita generation of RCRA municipal solid waste. Analysis of FY 2002 data is anticipated by September 2004. |
| In 2001 | FY 2001 data is not available for the diversion of municipal solid waste from land filling and combustion or maintaining per capita generation of RCRA municipal solid waste. Analysis of FY 2001 data is anticipated by |

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September 2003.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|--------------|
| Millions of tons of municipal solid waste diverted. | 68 | Not available | Data Lag | 0 | 81 | 80 | million tons |
| Daily per capita generation of municipal solid waste. | 4.5 | Not available | Data Lag | 0 | 4.5 | 4.5 | lbs. MSW |

Baseline: An analysis conducted in FY 2001 shows approximately 68 million tons (29.2%) of municipal solid waste diverted and 4.4 lbs of MSW per person daily generation. While data indicates that the growth in recycling rates has slowed, EPA has maintained the goal of a 35% recycling rate as part of the FY 2003-2008 Strategic Plan.

Waste and Petroleum Management Controls

- In 2006 Reduce releases to the environment by managing hazardous wastes and petroleum products properly.
- In 2005 Reduce releases to the environment by managing hazardous wastes and petroleum products properly.
- In 2004 In FY 2004, 72% of UST facilities were in significant operational compliance with release detection requirements (a decrease of -4% from the target of 76%) and 79% of UST facilities were in significant operational compliance with release prevention requirements (a decrease of -6% from the target of 83%). In FY 2004, States and regional offices reported that 64% of UST facilities were in compliance with the new UST measure. Between FY 1999 and FY 2004, confirmed UST releases averaged 12,641, and the annual number of confirmed releases in FY 2004 was 7,848. The RCRA program exceeded its FY 2004 goal by establishing permits or approved controls at an additional 3.7% of regulated facilities.
- In 2003 For UST facilities, 72% are in operational compliance with leak detection, and 79% are in operational compliance with spill prevention requirements. An additional 4.1% of the RCRA facilities have permits or approved controls, and 600 oil facilities are in compliance with spill requirements.
- In 2002 1.8% of RCRA hazardous waste management facilities received permits or other approved controls, and 580 oil facilities were in compliance with spill prevention, control and countermeasure provisions of the oil pollution regulations.

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In 2001 9.1% of RCRA hazardous waste management facilities received permits or other approved controls, and 593 oil facilities were in compliance with spill prevention, control and countermeasure provisions of the oil pollution regulations.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------------|
| Percent increase of RCRA hazardous waste management facilities with permits or other approved controls. | 9.0% | 4.5% | 4.1% | 3.7% | 2.8% | 2.5% | percentage pts. |
| Number of confirmed UST releases nationally. | | | | 7,848 | <10,000 | <10,000 | UST releases |
| Percentage of UST facilities in significant operational compliance with release detection requirements. | | | -8% | -4% | Not applicable | | percentage pts. |
| Percentage of UST facilities in significant operational compliance with release prevention (spill, overfill and corrosion protection) regulations. | | | -6% | -6% | Not applicable | | percentage pts. |
| Percent increase of UST facilities that are in significant operational compliance with both release detection and release prevention (spill, overfill, and corrosion protection requirements). | | | | | 1% | 1% | percent |

Baseline: FY 2004 marked the first baseline year that states and regional offices reported the percentage of UST facilities, out of a total estimated universe of approximately 256,000 facilities, that are in significant operational compliance with both release detection and release prevention (spill, overfill, and corrosion protection) requirements. At the end of FY 2004, the national compliance rate was 77 percent for release prevention, 72 percent for release detection, and 64 percent for the combined compliance measure. Between FY 1999 and FY 2004, confirmed UST releases averaged 12,641, and the annual number of confirmed releases in FY 2004 was 7,848. The RCRA program exceeded its FY 2004 goal by establishing permits or approved controls at an additional 3.7% of regulated facilities.

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OBJECTIVE: RESTORE LAND

By 2008, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by cleaning up and restoring contaminated sites or properties to appropriate levels.

Superfund Cost Recovery

- In 2006 Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.

- In 2005 Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.

- In 2004 EPA achieved its goal of addressing through enforcement, settlement or compromise/write-off all of the pending cost recovery cases with outstanding unaddressed past costs greater than \$200,000 and pending SOL concerns.

- In 2003 Ensured trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Addressed cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.

- In 2002 The goal was met. Cost recovery was addressed at 204 NPL and non-NPL sites of which 101 had total past costs greater than or equal to \$200,000 and potential statute of limitations (SOL) concerns. EPA secured cleanup and cost recovery commitments from private parties in excess of \$645 million.

- In 2001 None Provided

| | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|--|-----------------|----------------|----------------|-----------------|-------------------|----------------|---------|
| Performance Measures | | | | | | | |
| Refer to DOJ, settle, or write off 100% of Statute of Limitations (SOLs) cases for SF sites with total | Actuals 97.8 | Actuals 100 | Actuals 100 | Actuals 100% | Pres. Bud. 100 | Request 100 | Percent |

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| | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 |
|--|---|---------|---------|---------|------------|---------|
| Performance Measures | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request |
| unaddressed past costs equal to or greater than \$200,000 and report value of costs recovered. | | | | | | |
| Baseline: | In FY 98 the Agency will have addressed 100% of Cost Recovery at all NPL & non-NPL sites with total past costs equal or greater than \$200,000. | | | | | |

Superfund Potentially Responsible Party Participant

- In 2005 Reach a settlement or take an enforcement action by the time of the Remedial Action start at 90 percent of non-Federal Superfund sites that have viable, liable parties.

- In 2004 EPA reached a settlement or took an enforcement action by the start of remedial action at more than 98% of those Superfund sites having known non-Federal, viable, liable parties.

- In 2003 Maximized all aspects of PRP participation which included maintaining PRP work at 87% of the new remedial construction starts at non-Federal Facility Superfund, and emphasized fairness in the settlement process.

- In 2002 In FY 2002 the percentage of remedial construction starts initiated by responsible parties exceeded the target by one percent.

- In 2001 None Provided

| | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|---------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| PRPs conduct 70% of the work at new construction starts | 67.3 | 71 | 87 | | | | Percent |
| Percentage of Superfund sites at which settlement or enforcement action taken before the start of RA. | | | | 98% | 90 | 90 | Percent |

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Baseline: In FY 98 approximately 70% of new remedial work at NPL sites (excluding Federal facilities) was initiated by private parties. In FY2003, a settlement was reached or an enforcement action was taken with non-Federal PRPs before the start of the remedial action at approximately 90 percent of Superfund sites.

Assess and Cleanup Contaminated Land

- In 2006 Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.
- In 2005 Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.
- In 2004 In FY 2004, Superfund controlled human exposures at 83% (1,242 of 1,493) of eligible NPL sites and controlled groundwater migration at 67% (875 of 1,306) of eligible NPL sites, completed construction at 62% (926 of 1,498) of the eligible NPL sites, selected final remedies at 67% (1,003 of 1,498) of the eligible NPL sites. Of the 1,714 RCRA Corrective Action high priority facilities, 84% (1,440) have human exposures controlled and 70% (1,199) have groundwater migration controlled, reflecting the strong EPA/state partnership in this program. EPA completed 317,405 leaking underground storage tank cleanups by the end of FY 2004. The Agency has worked with state partners to evaluate multi-year cleanup goals in light of new pressures that have slowed the pace of cleanup in recent years. The result of this process has been a reduction of multi-year goals to a target number that better reflects the current challenges.
- In 2003 917 final Superfund site assessment decisions were made.
- In 2003 Superfund accomplished 380 removals, control of human exposures at 28 sites and groundwater migration at 54 sites, and 40 construction completions. The RCRA program controlled human exposures at 230 sites and groundwater migration at 175 sites. There were 18,518 LUST cleanups.
- In 2002 Human exposures to toxins were controlled at 172 RCRA facilities and toxic releases to groundwater were controlled at 171 RCRA facilities. 15,769 leaking underground storage tank cleanups were completed, and 42 Superfund construction completions were achieved.
- In 2002 Superfund initiated 426 removal actions and recorded 587 site assessment decisions, and the Brownfields program assessed 983 properties.
- In 2001 Human exposures to toxins were controlled at 179 RCRA facilities and toxic releases to groundwater were controlled at 154 RCRA facilities, 19,074 leaking underground storage tank cleanups were completed, and 47

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Superfund construction completions were completed.

In 2001 Superfund initiated 302 removal response actions and recorded 931 site assessment decisions, and the Brownfields program assessed 730 properties.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-------------|
| Number of leaking underground storage tank cleanups completed. | 19,074 | 15,769 | 18,518 | 14,285 | 21,000 | 18,300 | cleanups |
| Number of Superfund final site assessment decisions. | 931 | 587 | 917 | 548 | 500 | 500 | assessments |
| Number of Superfund construction completions. | 47 | 42 | 40 | 40 | 40 | 40 | completions |
| Number of Superfund hazardous waste sites with human exposures controlled. | | | 28 | 15 | 10 | 10 | sites |
| Number of Superfund hazardous waste sites with groundwater migration controlled. | | | 54 | 18 | 10 | 10 | sites |
| Number of final remedies (cleanup targets) selected at Superfund sites. | | | | 30 | 20 | 20 | remedies |
| Number of high priority RCRA facilities with human exposures to toxins controlled. | 179 | 207 | 230 | 195 | 225 | | facilities |
| Number of high priority RCRA facilities with toxic releases to groundwater controlled. | 154 | 174 | 175 | 150 | 203 | | facilities |
| Number of final remedies (cleanup targets) selected at RCRA sites using 2005 baseline. | | | | | | 89 | remedies |
| Percent of RCRA construction completions using 2005 baseline. | | | | | | 13 | percent |
| Number of high priority RCRA facilities with human exposures to toxins controlled using 2005 baseline. | | | | | | under dev't | facilities |
| Number of high priority RCRA facilities with toxic releases to groundwater controlled using 2005 | | | | | | under dev't | facilities |

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| | | | | | | |
|----------------------|---------|---------|---------|---------|------------|---------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request |

baseline.

Baseline: In FY 2004, Superfund controlled human exposures at 83% (1,242 of 1,493) of eligible NPL sites and controlled groundwater migration at 67% (875 of 1,306) of eligible NPL sites, completed construction at 62% (926 of 1,498) of the eligible NPL sites, selected final remedies at 67% (1,003 of 1,498) of the eligible NPL sites. Of the 1,714 RCRA Corrective Action high priority facilities, 84% (1,440) have human exposures controlled and 70% (1,199) have groundwater migration controlled, reflecting the strong EPA/state partnership in this program. The new performance measures for the RCRA program (with targets under development) reflect a new facility baseline (1,968 facilities) established in October 2004. In FY 2004, EPA completed 317,405 leaking underground storage tank cleanups by the end of FY 2004. The Agency has worked with state partners to evaluate multi-year cleanup goals in light of new pressures that have slowed the pace of cleanup in recent years. The result of this process has been a reduction of multi-year goals to a target number that better reflects the current challenges.

Prepare/Respond to Accidental/Intentional Release

- In 2006 Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.

- In 2005 Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.

- In 2004 By the end of FY 2004, there have been cumulative total of over 8,280 Superfund removal response actions initiated since 1980. EPA exceeded its FY 2004 expectations for readiness by reducing the core emergency response readiness deficit by 56%. EPA was involved in 308 oil spill responses in FY 2004. The Agency typically responds to or monitors 300 oil spill cleanups per year.

| | | | | | | | |
|--|---------|---------|---------|---------|------------|---------|---------------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Number of Superfund removal response actions initiated. | 302 | 426 | 380 | 385 | 350 | 350 | removals |
| Oil spills responded to or monitored by EPA. | 527 | 203 | 322 | 308 | 300 | 300 | spills |
| Number of inspections and exercises conducted at oil storage facilities that are required to have Facility | | | | | 360 | 100 | inspects/exer |

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| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 |
|---|---------|---------|---------|---------|------------|----------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request |
| Response Plans. | | | | | | |
| Percentage of emergency response and homeland security readiness improvement. | | | | 56% | 10% | 10% percent |

Baseline: By the end of FY 2004, there have been cumulative total of over 8,280 Superfund removal response actions initiated since 1980. EPA exceeded its FY 2004 expectations for readiness by reducing the core emergency response readiness deficit by 56%. EPA was involved in 308 oil spill responses in FY 2004. The Agency typically responds to or monitors 300 oil spill cleanups per year.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2008, provide and apply sound science for protecting and restoring land by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 3.

Research

Scientifically Defensible Decisions for Site Clean

- In 2006 Document the performance, including cost savings, of innovative characterization and remediation options, so that newer approaches with cost or performance advantages are applied for Superfund and other cleanup projects.
- In 2005 In FY 2005, complete at least four SITE demonstrations, with emphasis on NAPLs and sediments, in order to, by 2010, develop or evaluate 40 scientific tools, technologies, methods, and models, and provide technical support that enable practitioners to 1) characterize the nature and extent of multimedia contamination; 2) assess, predict, and communicate risks to human health and the environment; 3) employ improved remediation options; and 4) respond to oil spills effectively.
- In 2004 Provided risk assessors and managers with site-specific data sets on three applications detailing the performance of conventional remedies for contaminated sediments to help determine the most effective techniques for remediating contaminated sites and protecting human health and the environment.

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- In 2003 Delivered state-of-the-science report and methods to EPA and other stakeholders for risk management of fuel oxygenates; organic and inorganic contamination of sediments, ground water and/or soils; and oil spills to ensure cost-effective and technically sound site clean-up.
- In 2002 EPA provided evaluation information on six innovative approaches that reduce human health and ecosystem exposure from dense nonaqueous phase liquids (DNAPLs) and methly tertiary butyl-ether (MTBE) in soils and groundwater, and from oil and persistent organics in aquatic systems.
- In 2001 EPA provided technical information to support scientifically defensible and cost-effective decisions for clean-up of complex sites, hard-to-treat wastes, mining, oil spills near shorelines, and Brownfields to reduce risk to human health and the environment.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|----------------|
| Deliver the Annual SITE Program Report to Congress. | 0 | | | | | | report |
| Complete draft of the FY 2002 Annual SITE Report to Congress. | | 1 | 1 | | | | draft report |
| Reports on performance data for conventional sediment remedies for three sites. | | | | 3 reports | | | reports |
| SITE demonstrations completed | | | | | 4 | | demonstrations |
| Draft of FY05 Annual SITE Report to Congress | | | | | | 1 | Report |

Background: Barriers to cleaning up contaminated sites include uncertainty and high cost in either characterizing the site or implementing a remedy. Problematic issues include dense non-aqueous phase liquids, contaminated sediments, and contaminated ground water. Underestimation of the extent of contamination can lead to cost overruns or significant technical changes during remediation. For some sites, the available remedies are not able to achieve cleanup targets or costs are high. Site managers are reluctant to try new approaches without an independent assessment of their performance. Documenting the results of SITE demonstrations can accelerate the application of new technologies in the field, resulting in improvements in quality, timeliness, and/or cost of clean up.

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Healthy Communities and Ecosystems

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

OBJECTIVE: CHEMICAL, ORGANISM, AND PESTICIDE RISKS

Prevent and reduce pesticide, chemical, and genetically engineered biological organism risks to humans, communities, and ecosystems.

Decrease Risk from Agricultural Pesticides

- | | |
|---------|--|
| In 2006 | Ensure new pesticide registration actions (including new active ingredients, new uses) meet new health standards and are environmentally safe. |
| In 2006 | Percentage of acre treatments that will use applications of reduced-risk pesticides |
| In 2005 | Ensure new pesticide registration actions (including new active ingredients, new uses) meet new health standards and are environmentally safe. |
| In 2005 | Percentage of acre treatments that will use applications of reduced-risk pesticides |
| In 2004 | Decreased adverse risk from agricultural uses from 1995 levels. |
| In 2003 | Adverse risk from agricultural pesticides was decreased to ensure that new pesticides entering the market are safe for humans and the environment. |
| In 2002 | In FY 2002, EPA continued to register pest control products, including "safer" pesticides, thus ensuring that growers have an adequate number of pest control options available to them. |
| In 2001 | The Agency registered 9 new chemicals, exceeding its target by 2, and 267 new chemicals, underperforming its target by 83. |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------------|
| Register safer chemicals and biopesticides | | 107 | 124 | 143 | 135 | 143 | Regist. (Cum) |
| New Chemicals (Active Ingredients) | 53 | 60 | 72 | 79 | 84 | 94 | Regist. (Cum) |
| New Uses | 1896 | 2329 | 425 | 3,142 | 3479 | 3879 | Actions (Cum) |
| Percentage of acre-treatments with reduced risk pesticides | | 7.5% | 8 | Data Lag | 8.7% | 9% | Acre-Treatments |
| Maintain timeliness of S18 decisions | | | | | 45 | 45 | Days |
| Reduce registration decision times for new conventional chemicals | | | | | 7% | 10% | Reduction |
| Reduce registration decision times for reduced risk chemicals | | | | | 3% | 3.5% | Reduction |

Baseline: The baseline for registration of reduced risk pesticides, new chemicals, and new uses, is zero in the year 1996 (the year FQPA was enacted). Progress is measured cumulatively since 1996. The baseline for acres-treated is 3.6% of total acreage in 1998, when the reduced-risk pesticide acres-treatments was 30,332,499 and total (all pesticides) was 843,063,644 acre-treatments. Each year's total acre-treatments, as reported by Doane Marketing Research, Inc. serves as the basis for computing the percentage of acre-treatments using reduced risk pesticides. Acre-treatments count the total number of pesticide treatments each acre receives each year. As of 2003, there are no products registered for use against other potential bio-agents (non-anthrax). Conventional pesticides FY 2002 baseline for reducing decision time is 44 months; reduced risk pesticides FY 2002 baseline for reducing time is 32.5 months. The 2005 baseline for expedited new active ingredient pesticides is 4. The S18 2005 baseline is 45 days.

Reduce use of highly toxic pesticides

- In 2006 Decrease occurrence of residues of carcinogenic and cholinesterase-inhibiting neurotoxic pesticides on foods eaten by children from their average 1994-1996 levels
- In 2005 Decrease occurrence of residues of carcinogenic and cholinesterase-inhibiting neurotoxic pesticides on foods eaten

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by children from their average 1994-1996 levels

- In 2004 34% of samples of foods eaten by children showed occurrence of residues for carcinogenic or cholinesterase-inhibiting pesticides.
- In 2003 34.3% of samples of foods eaten by children showed occurrence of residues of carcinogenic or cholinesterase inhibiting neurotoxic pesticides.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|--------------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Reduce occurrence of residues on a core set of 19 foods eaten by children relative to detection levels for those foods reported in 1994-1996. | | | 34.3% | 34% | 27% | 14% | Red. Occurrence |

Baseline: Percent occurrence of residues of FQPA priority pesticides (organophosphates and carbamates) on samples of children's foods in baseline years 94-96. Baseline percent is 33.5% of composite sample of children's foods: apples, apple juice, bananas, broccoli, carrots, celery, grapes, green beans (fresh, canned, frozen), lettuce, milk, oranges, peaches, potatoes, spinach, sweet corn (canned and frozen), sweet peas (canned and frozen), sweet potatoes, tomatoes, and wheat.

Reassess Pesticide Tolerances

- In 2006 Ensure that through ongoing data reviews, pesticide active ingredients, and products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of the Native Americans
- In 2005 Ensure that through ongoing data reviews, pesticide active ingredients, and products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of the Native Americans
- In 2004 Ensured that through on-going data reviews, pesticide active ingredients and the products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of Native Americans.
- In 2003 Assured that pesticides active ingredients registered prior to 1984 and the products that contain them were

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reviewed to assure adequate protection for human health & the environment. Also considered the unique exposure scenarios such as subsistence lifestyles of Native Americans in regulatory decisions.

In 2002 Reregistration efforts delayed to focus on reviewing and testing pesticides against anthrax.

In 2001 EPA reassessed 40% of tolerances requiring reassessment under FQPA and issued a cumulative 72% of total REDs required, achieving both targets.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------------|
| Tolerance Reassessment | 40% | 66.9 | 68 | 73% | 87.7% | 100% | Tolerances (Cum) |
| Reregistration Eligibility Decisions (REDs) | | 72.7% | 75 | 77.6% | 88.2% | 92.7% | Decisions (Cum) |
| Product Reregistration | | 307 | 306 | 127 | 400 | 400 | Actions |
| Tolerance reassessments for top 20 foods eaten by children | 43.5% | 65.6 | 65.6 | 68.9% | 93% | 100% | Tolerances (Cum) |
| Number of inert ingredients tolerances reassessed | | | | 28 | 100 | 100 | tolerances |
| Reduce decision time for REDs | | | | | 7% | 10% | Reduction |

Baseline: The baseline value for tolerance reassessments is the 9,721 tolerances that must be reassessed by 2006 using FQPA health and safety standards. The baseline for REDS is the 612 REDs that must be completed by 2008. The baseline for inerts tolerances is 870 that must be reassessed by 2006. The baseline for the top 20 foods eaten by children is 893 tolerances that must be reassessed by 2006. Reregistration decision time baseline 38-40 months.

Testing of Chemicals in Commerce for Endocrine Disruptors

In 2006 Endocrine Disruptor Screening Program will continue its progress toward completing the validation of endocrine test methods.

In 2005 Standardization and validation of screening assays

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In 2004 EPA did not meet its goal for standardization and validation of screening assays as described in FY 2004 and will begin tracking a more meaningful set of measures in FY 2006.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|-----------------------------------|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|--------------------|
| Screening Assays Completed | | | | 0 | 11 | | Screening assay |
| Detailed Review Papers Completed. | | | | | | 18 | Papers |
| Prevalidation Studies Completed. | | | | | | 58 | Pre-val Studies |
| Validation Studies Completed. | | | | | | 80 | Valid. Studies |
| Peer Reviews. | | | | | | 10 | Peer Reviews |
| Assays Ready for Use. | | | | | | 11 | Assays |

Baseline: Baseline - The Food Quality Protection Act of 1996 (FQPA) requires EPA to use validated assays to screen chemicals for their potential to affect the endocrine system. The development and validation of assays is currently the principal effort in implementing the Endocrine Disruptor Screening Program (EDSP). The validation process consists of several discrete steps:

Detailed Review Paper is the first stage of the overall validation process. It is a review of the scientific literature relevant to an assay and discusses the scientific principles on which the assay is based, reviews candidate protocols and makes recommendations as to which is most suitable as a starting point for assay refinement and validation.

Prevalidation consists of studies to optimize and standardize the protocol and verify the ability of the protocol to accurately measure the endpoints of concern.

Validation by Multiple Labs determines the transferability of the protocol to other laboratories and determines inter-laboratory variability.

Peer review is review by an independent group of experts of the scientific work establishing the validity of the protocol.

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Assays Ready for Use are methods whose validation have been successfully completed and peer reviewed, and therefore are judged by the Agency to be suitable for use in the EDSP either as primary or alternative tests establishing the validity of the protocol.

Process and Disseminate TRI Information - OEI

- In 2006 The increased use of the Toxic Release Inventory Made Easy (TRI-ME) will result in a total burden reduction of 5% for FY 2005 from FY 2004 levels.
- In 2005 The increased use of the Toxic Release Inventory Made Easy (TRI-ME) will result in a total burden reduction of 5% for FY 2004 from FY 2003 levels.
- In 2004 Comparing FY 2004 to FY 2003, there was a 73 percent increase in the number of reports on chemical releases and other waste management data submitted to EPA via the internet and EPA's Central Data Exchange (CDX). However, even with this sizable increase, only 38 percent of all chemical forms were submitted using CDX, short of the FY 2004 goal of 50 percent.
- In 2003 8,000 facilities reported expanded information on releases and waste management of lead and lead compounds in TRI in Reporting Year 2001 and increased usage of TRI-ME which resulted in total burden reduction of 5% for Reporting Year 2002.
- In 2002 EPA reduced reporting burden, improved data quality, lowered program costs, and speeded data publication by increasing the amount of TRI electronic reporting from 70% to 92%.
- In 2001 120,000 chemical submissions and revisions processed; published annual summary of TRIS database in April 2001; and TRI Public Data Release published in April 2001.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|---------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | Percent |
| Total electronic reporting of all chemical submissions processed. (Includes diskette submissions created by ATRS, TRI-ME, and other reporting software programs, as well as web-based submissions.) | | 92 | | | | | |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------------------|
| TRI Public Data Release | Published | | | | | | Published |
| Chemical submissions and revisions processed. | 120,000 | | | | | | Forms |
| TRIS database complete and report issued | Published | | | | | | Published |
| Facilities reporting releases and waste management of lead and lead compounds. | | | | | | | 8561 Facilities |
| Percentage of TRI chemical forms submitted over the Internet using TRI-ME and the Central Data Exchange. | | | | | | | 25 38% Percent |
| Percentage increase of TRI chemical forms submitted over the Internet using TRI-ME and the Central Data Exchange. | | | | | | | 10 10 Percent |

Baseline: In FY 2001, TRI electronic reporting was 70%.

Reduce Wildlife Incidents and Mortalities

- In 2006 Reduce from 1995 levels the number of incidents involving mortalities to nontargeted terrestrial and aquatic wildlife caused by pesticides
- In 2005 Reduce from 1995 levels the number of incidents involving mortalities to nontargeted terrestrial and aquatic wildlife caused by pesticides
- In 2004 The amount of data for wildlife incidents and mortalities was insufficient for analysis.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-------------------|
| Number of incidents and mortalities to terrestrial and aquatic wildlife caused by the 15 pesticides responsible for the greatest mortality to such wildlife | | | | | 0% | 11 | 14 % reduction |

Baseline: 80 reported bird incidents (involving 1150 estimated bird casualties); 65 reported fish incidents (involving 632,000 estimated fish casualties) as reported in 1995.

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Managing PBT Chemicals Internationally

In 2006 Collect mercury use and emission inventory data for key sectors in China and India.

| | | | | | | | |
|--|---------|---------|---------|---------|------------|---------|--------------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Emission inventory for power sectors in China and India. | | | | | | 20 | power plants |

Baseline: Global mercury use and emissions estimates indicate that China and India are among the world's largest emitters and users of mercury. While a 2002 United Nations report indicates that over 50% of anthropogenic atmospheric mercury emissions are from Asia, accurate measures do not exist for quantifying emissions and uses for specific source sectors. Targeting EPA emissions reduction efforts requires accurate information on sources.

Exposure to Industrial / Commercial Chemicals

In 2006 Reduce exposure to and health effects from priority industrial/commercial chemicals

In 2005 Reduce exposure to and health effects from priority industrial / commercial chemicals

In 2004 Data available in 2006.

In 2001 4,885 transformers and 9,494 capacitors were safely disposed of in 2001.

| | | | | | | | |
|--|---------|---------|---------|-----------|------------|---------|--------------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Annual number of Large Transformers Safely Disposed | 4,885 | | | Data lag. | 5000 | 5,000 | Transformers |
| Annual number of Large Capacitors Safely Disposed | 9,494 | | | Data lag | 9000 | 9,000 | Capacitors |
| Number of children aged 1-5 years with elevated blood lead levels (>10 ug / dl) | | | | Data lag | 225,000 | | children |
| Annual reduction in the number of children aged 1-5 years with elevated blood lead levels (>10 ug /dl) | | | | | | 45,000 | children |

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Baseline: 1999/2000 baseline released in January 2003: Approximately 400,000 cases of childhood lead poisoning cases according to NHANES data. In 2004 a larger data set was included as we will be expanding to include more EPA Regional efforts that will include all federally administered and State administered programs. The FY2003 data for a new baseline will not be available until 2005. The baseline for PCB transformers is estimated at 2.2 million units and for capacitors is estimated at 1.85 million units as of 1988 as noted in the 1989 PCB Notification and Manifesting Rule. From 1991-2001 there was a declining trend in PCB disposal due to failing equipment and environmental liability: the total number of PCB large capacitors safely disposed of is 436,485 and the total number of PCB transformers safely disposed of is 172,672 as of 2002.

Risks from Industrial / Commercial Chemicals

- In 2006 Identify, restrict, and reduce risks associated with industrial/commercial chemicals.
- In 2005 Identify, restrict, and reduce risks associated with industrial/commercial chemicals.
- In 2004 98 High Production Volume chemicals with complete Screening Information Data Sets (SIDS) were submitted to the OECD SIDS Initial Assessment Meeting.
- In 2004 EPA reviewed all 1,377 Pre-manufacturing Notices reviewed during FY 2004, ensuring that those new chemicals marketed were safe for humans and the environment.
- In 2003 Of the approximately 1,633 applications for new chemicals and microorganisms submitted by industry ensured those marketed are safe for humans and the environment. Increased proportion of commercial chemicals that have undergone PMN review to signify they are properly managed and may be potential green alternatives to existing chemicals.
- In 2002 EPA reviewed all 1,943 Pre-manufacturing Notices received during FY 2002. At the end of 2002, 21.5 percent of all chemicals in commerce had been assessed for risks. A large fraction of these chemicals also may be "green" alternatives to existing chemicals in commerce.
- In 2001 Data was obtained from test plans submitted by industry for 724 chemicals already in commerce.
- In 2001 EPA reviewed 1,770 Premanufacturing Notices. By the end of 2001, 21 percent of all chemicals in commerce had been assessed for risks.

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|--------------------|
| Number of TSCA Pre-Manufacture Notice Reviews | 1770 | 1943 | 1,633 | 1,377 | | | Notices |
| Through chemical testing program, obtain test data for high production volume chemicals on master testing list. | 724 | | | | | | Chemicals |
| Notice of Commencements | 21.0 | | | | | | NOCs (Cum) |
| Make screening level health and environmental effects data publicly available for sponsored HPV chemicals | | 843 | | 1,309 | | | cum. chemicals |
| Reduction in the current year production-adjusted Risk Screening Environmental Indicators risk-based score of releases and transfers of toxic chemicals. | | | | Data lag | 12% | | Index |
| High Production Volume chemicals with complete Screening Information Data Sets (SIDS) submitted to OECD SIDS Initial Assessment Meeting | | | | 98 | | | chemicals |
| Percentage of chemicals identified as highest priority by the Acute Exposure Guideline Levels (AEGs) Program with short-term exposure limits established. | | | | | 52% | 60% | Total Chemicals |
| Number of chemicals or organisms introduced into commerce that pose unreasonable risks to workers, consumers, or the environment. | | | | | | 0 | Chemicals |
| Percentage of HPV chemicals identified as priority concerns through assessment of Screening Information Data Sets (SIDS) and other information with risks eliminated or effectively managed. | | | | | | 100 | % of HPV Chems. |
| Cumulative number of chemicals for which VCCEP data needs documents are issued by EPA in response to Industry sponsored Tier 1 risk assessments. | | | | | | 8 | Cumul. Chems. |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | 3 | % Reduction |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---|-------------|
| Annual percent reduction in relative risk index for chronic human health associated with environmental releases of industrial chemicals in commerce as measured by the RSEI Model. | | | | | | | | |

Baseline: The baseline for TSCA PMNs in FY2004 is zero. (EPA receives about 1,700 PMNs per year for chemicals about to enter commerce. From 1979-2002, EPA reviewed about 40,000 PMNs. Of the 78,000 chemicals potentially in commerce, 16,618 have gone through the risk-screening process of Notice of Commencement.) The baseline for HPV measure is zero chemicals in 1998. The baseline for the RSEI measure is the index calculated for 2001. Baseline is 2002; calculation methodology by addition of AEGL values (10 minute, 1 hour, 4 hour and 24 hour exposure periods) and numbers of chemicals addressed. There is a list maintained by the AEGL FACA committee of highest priority chemicals: 99 chemicals are on List 1 which was generated at the program's inception in 1996 and 137 chemicals are highest priority on List 2 which was generated in 2001. Therefore the total of highest priority chemical currently stands at 236 chemicals, however chemicals can be added or deleted from the list to fit stakeholder needs which is why percentage targets have been provided. 2001 levels will serve as the baseline reference point for the percent reduction in relative risk index for chronic human health associated with environmental releases of industrial chemicals in commerce as measured by Risk Screening Environmental Indicators Model analyzing results to date. Measurement Development Plans exist for HPV, VCCEP, and New Chemicals.

Chemical Facility Risk Reduction

- In 2006 Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.
- In 2005 Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.
- In 2004 Over 2,200 risk management plan audits were completed between FY 2000 and FY 2004.
- In 2003 EPA audited 300 risk management plans.

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In 2002 Data not available.

In 2001 5 states implemented accident prevention programs and 438 risk management plan audits were completed.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|--------|
| Number of risk management plan audits completed. | 438 | Not Available | 300 | 730 | 400 | 400 | audits |
| Number of states implementing chemical accident prevention programs. | 5 | 1 | | | | | states |

Baseline: 1,059 Risk Management Plan audits were completed between FY 2000 and FY 2003.

OBJECTIVE: COMMUNITIES

Sustain, clean up, and restore communities and the ecological systems that support them.

World Trade Organization - Regulatory System

In 2006 Assist key trade partner countries in assessing environmental effects of trade liberalization

In 2005 Assist trade partner countries in completing environmental reviews

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------|
| Number of environmental reviews initiated by FTAA countries following the enactment of the 2002 Trade Promotion Act (TPA). | | | | | 3 | 3 | countries |
| Latin American countries initiating environmental assessments of trade liberalization | | | | | | 3 | countries |

Baseline: As of the end of FY 2003, two environmental reviews (Chile and Singapore) have been initiated since the enactment of the 2002 Trade Promotion Act.

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Mexico Border Outreach

In 2006 Develop air quality assessments and programs to improve air quality standards in border communities.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------|
| Border communities monitoring for a pollutant that has not previously been monitored in that community | | | | | | 1 | community |

Baseline: In 2004, there are no border communities monitoring for pollutants that have not previously been monitored in their community. There are 17 monitoring stations along the US-Mexico Border (source: US-Mexico Border XXI Program: Progress Report 1996-2000). Monitoring for: carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, particulate matter 2.5 micrometers or less in diameter U.S. only, particulate matter 10 micrometers or less in diameter, total suspended particulate matter Mexico only, lead.

Revitalize Properties

In 2006 Assess, clean up and promote the reuse of Brownfields properties, and leverage jobs and cleanup/redevelopment funding.

In 2005 Leverage jobs by assessing, promoting the cleanup and reuse of Brownfields properties.

In 2004 Data will be available in mid-year 2005 to verify assessment of 1,000 properties, awarding of 25 cleanup grants, cleanup of 60 properties, leveraging of 5,000 jobs, training of 200 job training participants, placement of 65% of trainees, and leveraging of \$1.0 billion in cleanup and redevelopment funds.

In 2003 \$1.49B in cleanup and redevelopment funds were leveraged through brownfiled revitalization efforts.

In 2003 By the end of FY 2003, the Brownfields program leveraged 5,023 jobs, achieving a 62% placement rate for Brownfields Job Training Program participants, and leveraged of \$1.49 billion in cleanup and redevelopment funding.

In 2002 \$0.7 billion of cleanup and redevelopment was leveraged.

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- In 2002 2,091 jobs were generated from Brownfields activities.
- In 2001 \$0.9 billion of cleanup and redevelopment was leveraged.
- In 2001 3,030 jobs were generated from Brownfields activities.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|----------|------------|-----------|-----------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Number of Brownfields properties assessed. | 730 | 983 | 1,052 | Data lag | 1,000 | 1,000 | assessments |
| Number of Brownfields cleanup grants awarded. | | | | 75 | 25 | 25 | grants |
| Number of properties cleaned up using Brownfields funding. | | | | Data lag | 60 | 60 | properties |
| Number of acres of Brownfields property available for reuse. | | | | Data lag | no target | no target | acres |
| Number of jobs leveraged from Brownfields activities. | 3,030 | 2091 | 5,023 | Data lag | 5,000 | 5,000 | jobs |
| Percentage of Brownfields job training trainees placed. | | | 62% | Data lag | 65% | 65% | trainees placed |
| Amount of cleanup and redevelopment funds leveraged at Brownfields sites. | \$0.9B | \$0.7B | \$1.49B | | \$1.0B | \$1.0B | funds |

Baseline: By the end of FY 2003, the Brownfields program assessed 1,052 properties, leveraged 5,023 jobs, achieved a 62% placement rate for Brownfields job training program participants, and leveraged \$1.49B in cleanup and redevelopment funding.

OBJECTIVE: ECOSYSTEMS

Protect, sustain, and restore the health of natural habitats and ecosystems.

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Protecting and Enhancing Estuaries

- In 2006 Working with NEP partners, protect or restore an additional 25,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program (NEP).
- In 2005 Working with NEP partners, protect or restore an additional 25,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program (NEP).
- In 2004 Restored and protected 107,000 acres of estuary habitat through the implementation of Comprehensive Conservation and Management Plans (CCMPs).
- In 2003 Restored and protected 118,171 acres of estuary habitat through the implementation of Comprehensive Conservation and Management Plans (CCMPs).
- In 2002 Restored and protected over 137,000 acres of estuary habitat through the implementation of Comprehensive Conservation and Management Plans (CCMPs).
- In 2001 Restored and protected 70,000 acres of estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs).

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|-------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Acres of habitat restored and protected nationwide as part of the National Estuary Program. (incremental) | 70,000 | 137,710 | 118,171 | 107,000 | 25,000 | 25,000 | Acres |

Baseline: As of January 2000, there were over 600,000 acres of habitat preserved, restored, and/or created.

Gulf of Mexico

- In 2006 Prevent water pollution and protect aquatic species in order to improve the health of the Gulf of Mexico.
- In 2005 Prevent water pollution and protect aquatic species in order to improve the health of the Gulf of Mexico.

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- In 2004 Assisted the Gulf States in implementing watershed restoration actions in 71.2 impaired coastal river and estuary segments.
- In 2003 Assisted the Gulf States in implementing watershed restoration actions in 95 impaired coastal river and estuary segments.
- In 2002 Assisted the Gulf States in implementing restoration actions by supporting the identification of place-based projects in 137 State priority coastal river and estuary segments.
- In 2001 Assisted the Gulf States in implementing watershed restoration action strategies (WRAS) or their equivalent in 37 priority coastal river and estuary segments.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------------|
| Impaired Gulf coastal river and estuary segments implementing watershed restoration actions (incremental). | 37 | 137 | 95 | 71.20 | | | Segments |
| Prevent water pollution and protect aquatic systems so that overall aquatic system health of coastal waters of the Gulf of Mexico is improved | | | | | | 2.4 | Scale |
| Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico, as measured by the five year running average | | | | | 14,128 | 14,128 | KM ² |

Baseline: There are 95 coastal watersheds at the 8-digit hydrologic unit code (HUC) scale on the Gulf coast. The Gulf of Mexico Program has identified 12 priority coastal areas for assistance. These 12 areas include 30 of the 95 coastal watersheds. Within the 30 priority watersheds, the Gulf States have identified 354 segments that are impaired and not meeting full designated uses under the States' water quality standards. 71 or 20% is the target proposed to reinforce Gulf State efforts to implement 5-yea basin rotation schedules. The target of 71 is divided by 5 to achieve the goal for assistance provided in at least 14 impaired segments each year for the next 5 years. The 1996-2000 running average size = 14,128 km2. In 2002, the Gulf of Mexico rating of fair/poor was 1.9

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where the rating is based on a 5-point system in which 1 is poor and 5 is good and is expressed as an aerially weighted mean of regional scores using the National Coastal Condition Report indicators.

Great Lakes Implementation Actions

- In 2006 Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved.
- In 2005 Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved by at least 1 point
- In 2004 The reduction in the phosphorus concentration in Lake Erie was not met; the problem continues to be studied in conjunction with the Canadian government.
- In 2003 Phosphorus concentrations were exceeded.
- In 2002 By removing or containing contaminated sediments, 100,000-200,000 pounds of persistent toxics which could adversely affect human health will no longer be biologically available through the food chain. This contributes to decreasing fish contaminants and advances the goal of removing fish advisories

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------------|
| Long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish. | | Declining | Data Lag | Available 2005 | | | Annual decrease |
| Long-term concentration trends of toxic chemicals in the air. | | Declining | Data Lag | Available 2005. | | | Annual decrease |
| Total phosphorus concentrations (long-term) in the Lake Erie Central Basin. | | Mixed | 18.40 | 21.2 Ug/l | 10 | | Ug/l |
| Average concentrations of PCBs in whole lake trout and walleye samples will decline. | | | | | 5% | 5% | Annual Decrease |
| Average concentrations of toxic chemicals in the air in the Great Lakes basin will decline | | | | | 5% | 7% | Annual Decrease |

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| | | | | | | | |
|---|---------|---------|---------|---------|------------|---------|-----|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Restore and delist Areas of Concern (AOCs) within the Great Lakes basin | | | | | 3 | 3 | AOC |

Baseline: In 2003, Great Lakes rating of 20 on a 40 point scale where the rating uses select Great Lakes State of the Lakes Ecosystem indicators based on a 1 to 5 rating system for each indicator, where 1 is poor and 5 is good. The trend (starting with 1972 data) for toxics in Great Lakes top predator fish is expected to be less than 2 parts per million (the FDA action level) but far above the Great Lakes Initiative target or levels at which fish advisories can be removed. The trend (starting with 1992 data) for PCB concentrations in the air is expected to range from 50 to 250 picograms per cubic meter. In 2002, no Areas of Concern had been delisted. The 2.1 million yards of remediated sediments are the cumulative number of yards from 1997 to 2001.

Wetland and River Corridor Projects

In 2006 Working with partners, achieve no net loss of wetlands.

In 2005 Working with partners, achieve no net loss of wetlands.

| | | | | | | | |
|--|---------|---------|---------|---------|-------------|-------------|-------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Working with partners, achieve no net loss of wetland acres (cumulative) | | | | | No Net Loss | 200,000 | Acres |
| Annually, in partnership with the Corps of Engineers and States, achieve no net loss of wetlands in the Clean Water Act Section 404 regulatory program | | | | | No Net Loss | No Net Loss | Acres |

Baseline: Annual net loss of an estimated 58,500 acres. In partnership with the Corps of Engineers, a baseline and initial reporting will begin in FY 2004 on net loss of wetlands in the CWA Section 404 regulatory programs.

Chesapeake Bay Habitat

In 2006 Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved enough so that there are 100,000 acres of submerged aquatic vegetation. (cumulative)

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- In 2006 Reduce nitrogen loads by 80 million pounds per year; phosphorus loads by 9.0 million pounds per year, and sediment loads by 1.16 million tons per year from entering the Chesapeake Bay, from 1985 levels

- In 2005 Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved enough so that there are 91,000 acres of submerged aquatic vegetation. (cumulative)

- In 2005 Reduce nitrogen loads by 74 million pounds per year; phosphorus loads by 8.7 million pounds per year, and sediment loads by 1.06 million tons per year from entering the Chesapeake Bay, from 1985 levels.

- In 2004 Due to record wet weather in 2003, massive amounts of nutrients and sediments were washed into the Chesapeake Bay, which resulted in a 30% decline in submerged aquatic vegetation in a single year.

- In 2003 Improved habitat in the Chesapeake Bay.

- In 2002 Meeting the annual performance goal to improve habitat in the Bay requires adherence to commitments made by the Chesapeake 2000 agreement partners and monumental effort/resources from all levels of government (local, state, and a range of Federal agencies) and from private organizations/citizens.

- In 2001 Improved habitat in the Chesapeake Bay by reducing 48.1 million pounds of nitrogen, 6.84 million pounds of phosphorous and restored over 69,000 acres of submerged aquatic vegetation.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|-----------------|-----------------|--------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Reduction, from 1985 levels, of nitrogen (M/lbs), phosphorus (M/lbs), and sediment loads (tons) entering Chesapeake Bay. (cumulative) | | | | | 74/8.7/1.0 6 | 80/9.0/1.1 6 | Lbs/Lbs/Tons |
| Acres of submerged aquatic vegetation (SAV) present in the Chesapeake Bay. (cumulative) | 69,126 | 85,252 | 89,659 | 64,709 | 91,000 | 100,000 | Acres |

Baseline: In 1984, there were 37,000 acres of submerged aquatic vegetation in the Chesapeake Bay. In 2002, baseline for nitrogen loads was 51 million pounds per year; phosphorus loads was 8.0 million pounds per year; and sediment loads was 0.8 million tons per year.

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OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2008, provide a sound scientific foundation for EPA's goal of protecting, sustaining, and restoring the health of people, communities, and ecosystems by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 4.

Research

Human Health Risk Assessment Research

In 2006 By 2006, deliver at least 20 dose-response assessments, provisional values, or pathogen risk assessments so that by 2010, at least 100 assessments have been made available through the Integrated Risk Information System (IRIS) database and other communications to EPA program offices, regions, states and Tribes providing the necessary information to predict risk and make risk management decisions that protect public health.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 |
|---|---------|---------|---------|---------|------------|----------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request |
| Completed dose-response assessments, provisional values, or pathogen risk assessments | | | | | | 20 Assessments |

Background: This FY2006 APG produces dose-response assessments and health risk assessment information to support regulatory actions and risk management decisions by clients including EPA, other Federal partners, states, tribes, and local governments. These assessments integrate relevant peer-reviewed scientific literature and assessment methods to characterize the known or potential effects of specific contaminants on human health. Many of these dose-response assessments will be posted on EPA's Integrated Risk Information System (IRIS) when completed. IRIS is widely used throughout EPA and the broader risk management community as the premiere source of hazard and dose-response information for health risk assessment. The assessments conducted in this APG will serve to identify and characterize environmentally-related human health problems and support evaluation of the effectiveness of risk management actions aimed at improving public health and safeguarding the environment. In particular, these assessments will be used to inform the decision-making process and provide scientific information to decision makers who must make regulatory, enforcement, and remedial action decisions for chemical contaminant list microbes and chemicals in drinking water; residual risk assessments for air pollutants; site-specific clean-up decisions at Superfund sites; pesticide registration; and control of multi-media toxicants.

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EPA also uses risk assessment information as part of the Agency's risk communication efforts to convey information on environmental hazards to the public. As a result, risk assessment information provided by products under this APG, is an integral component of environmental decision-making and information transfer processes under the statutes implemented by the Agency.

Research on Endocrine Disrupting Chemicals

In 2006 By 2006, develop and transfer standardized protocols for screening chemicals for their potential effects on the endocrine system, so that EPA's Office of Prevention, Pesticides, and Toxic Substances has the necessary protocols to validate for use in the Agency's Endocrine Disruptors Screening Program, mandated by the Food Quality Protection Act, as determined by independent expert review.

| | | | | | | | |
|---|---------|---------|---------|---------|------------|---------|--------|
| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Report on a protocol to screen environmental chemicals for their ability to interact with the male hormone receptor | | | | | | 1 | Report |

Background: The Endocrine Disruptors program provides EPA with the scientific information necessary for the Agency to reduce or prevent potential unreasonable risks to human health and wildlife from exposures to chemicals that adversely affect the endocrine system, called endocrine disrupting chemicals (EDCs). In 1998, the Endocrine Disruptors Screening and Testing Advisory Committee, a FACA convened by EPA to provide advice on the development and implementation of a screening program, identified a few assays to use as starting points. However, as they affirmed, no assays were considered to be "validated" at the time. EPA's endocrine disruptors research program refined these assays and developed new ones when the starting point assays were found to be unreliable or inadequate. Between FY 2000 and FY 2006, EPA will have completed 22 milestones associated with this APG, including reducing scientific uncertainty regarding the mechanisms by which chemicals interfere with the endocrine system, developing reports on a variety of screening assays in different animal species (e.g., fish, frogs, rats), and transferring protocols that have been standardized in our laboratories and accompanying background documentation to OPPTS. OPPTS will have the protocols validated by an external peer review panel and will implement a screening program using them. The data that will be developed from the application of the validated protocols will enable the Agency to conduct risk assessments from which decisions can be made that will reduce or prevent unreasonable risks to humans and wildlife from exposure to endocrine disruptors.

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Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, and will determine whether EPA has been successful in meeting its annual and long-term commitments for research.

Homeland Security Research

- In 2006 Provide methods, guidance documents, technologies and tools to first responders and decision-makers to enhance safety and to mitigate adverse effects of the purposeful introduction of hazardous chemical or biological materials into the environment.
- In 2005 By FY 2005, provide tools, case studies, and technical guidance so that, by FY 2006, first responders and decision-makers will have the methods, guidance documents, and technologies to enhance safety and to mitigate adverse effects of the purposeful introduction of hazardous chemical or biological materials into the environment.
- In 2004 Provided a database of EPA experts on topics of importance to assessing the health and ecological impacts of actions taken against homeland security that is available to key EPA staff and managers who might be called upon to rapidly assess the impacts of a significant terrorist event.
- In 2004 Provided to building owners, facility managers, and others, methods, guidance documents, and technologies to enhance safety in large buildings and to mitigate adverse effects of the purposeful introduction of hazardous chemical or biological materials into indoor air.
- In 2004 Verified two point-of-use drinking water technologies that treat intentionally introduced contaminants in drinking water supplies for application by commercial and residential users, water supply utilities, and public officials.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request |
|---|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|
| Verify two treatment technologies for application in buildings by commercial and residential users, utilities, and public officials to treat contaminants in drinking water supplies. | | | | 2 verifications | | verifications |
| Prepare ETV evaluations on at least 5 new | | | | 10 | | verifications |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request |
|--|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|
| technologies for detection, containment, or decontamination of chemical/biological contaminants in buildings to help workers select safe alternatives. | | | | verification | | |
| Through SBIR awards, support as least three new technologies/methods to decontaminate HVAC systems in smaller commercial buildings or decontaminate valuable or irreplaceable materials. | | | | 4 techs/ method | | techs/methods |
| Prepare technical guidance for building owners and facility managers on methods/strategies to minimize damage to buildings from intentional introduction of biological/chemical contaminants. | | | | guidance | | guidance |
| A restricted access database of EPA experts with knowledge, expertise, and experience for use by EPA to rapidly assess health and ecological impacts focused on safe buildings and water security. | | | | 1 database | | database |
| Risk assessment toolbox to predict and reduce the consequences of chemical/biological attacks in U.S. cities. | | | | | 1 | toolbox |
| Technical guidance for water system owners and operators on methods/strategies for minimizing damage from intentional introduction of biological/chemical contaminants | | | | | 09/30/05 | tech. guidance |
| Water system-related case studies that provide a spectrum of contingency planning situations and responses, including one specifically focused on the National Capital area | | | | | 09/30/05 | case studies |
| Comprehensive guidance document for building owners and managers on restoration of buildings after terrorist contamination with biological or | | | | | | 1 Guidance |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|----------|
| chemical hazards | | | | | | | |
| Guidance document for emergency and remedial response personnel and water utility operators for the restoration of water systems after terrorist contamination with biological or chemical hazards | | | | | | 1 | Guidance |
| Comprehensive guidance package including data, methodologies, and other risk assessment tools that will assist emergency responders in establishing remediation goals at incident sites | | | | | | 1 | Guidance |

Background: EPA's homeland security research provides appropriate, effective, and rapid risk assessment guidelines and technologies to help decision-makers prepare for, detect, contain, and decontaminate building and water treatment systems against which chemical and/or biological attacks have been directed. The Agency intends to expand the state of the knowledge of potential threats, as well as its response capabilities, by assembling and evaluating private sector tools and capabilities so that preferred response approaches can be identified, promoted, and evaluated for future use by first responders, decision-makers, and the public. This APG will provide guidance documents for the restoration of buildings and water systems and the establishment of remediation goals. These products will enable first responders to better deal with threats to the public and the environment posed by the intentional release of toxic or infectious materials.

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Compliance and Environmental Stewardship

Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that promote environmental stewardship.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2008, strengthen the scientific evidence and research supporting environmental policies and decisions on compliance, pollution prevention, and environmental stewardship.

Research

New Technologies

- In 2006 Provide appropriate and credible performance information about new, commercial-ready environmental technology that influences users to purchase effective environmental technology in the U.S. and abroad.
- In 2005 By FY 2005, complete thirty verifications and four testing protocols for a program cumulative total of 280 verifications and 88 testing protocols for new environmental technologies so that, by 2009, appropriate and credible performance information about new, commercial-ready environmental technology is available that influences users to purchase effective environmental technology in the US and abroad.
- In 2004 Verified 35 air, water, greenhouse gas, and monitoring technologies so that States, technology purchasers, and the public will have highly credible data and performance analyses on which to make technology selection decisions.
- In 2003 Developed 10 testing protocols and completed 40 technology verifications for a cumulative Environmental Technology Verification (ETV) program total of 230 to aid industry, states, and consumers in choosing effective technologies to protect the public and environment from high risk pollutants.
- In 2002 EPA formalized generic testing protocols for technology performance verification, and provided additional performance verifications of pollution prevention, control and monitoring technologies in all environmental media.

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In 2001 EPA developed, evaluated, and delivered technologies and approaches that eliminate, minimize, or control high risk pollutants from multiple sectors. Delivery of the evaluative report on the Environmental Technology Verification (ETV) pilot program is delayed until FY 2002.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------------|
| Deliver a Report to Congress on the status and effectiveness of the Environmental Technology Verification (ETV) Program during its first five years. | 0 | | | | | | report |
| Complete 20 stakeholder approved and peer-reviewed test protocols in all environmental technology categories under ETV, and provide them to testing organizations world-wide. | | 20 | | | | | protocols |
| Verify and provide information to States, technology purchasers, and the public on 40 air, water, pollution prevention and monitoring technologies for an ETV programmatic total of 230 verifications. | | | 40 | | | | verifications |
| Complete an additional 10 stakeholder approved and peer-reviewed test protocols in all environmental technology categories under ETV, and provide them to international testing organizations. | | | 10 | | | | protocols |
| Through the ETV program, verify the performance of 35 commercial-ready environmental technologies. | | | | 35 verification | | | verifications |
| Verifications completed | | | | | 15 | | verifications |
| Testing protocols completed | | | | | 2 | | protocols |
| Percent of respondents to survey of vendors of ETV-verified technologies stating that ETV information positively influenced sales and/or vendor innovation. | | | | | | 60% | Respondents |

Background: Actual environmental risk reduction can be directly related to performance and effectiveness of environmental technologies purchased and used. Private sector technology developers produce almost all the new technologies

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purchased in the U.S. and around the world. Purchasers and permittees of environmental technologies need an independent, objective, high quality source of performance information in order to make more informed decisions; and vendors with innovative, improved, faster, and cheaper environmental technologies need a reliable source of independent evaluation to be able to penetrate the environmental technology market. EPA's Environmental Technology Verification (ETV) program develops testing protocols for, and verifies the effectiveness of, new environmental technologies. EPA has designed surveys of vendors, purchasers, and permittees to determine ETV's impact on 1) vendor sales and technology innovation, 2) purchase decisions, and 3) permitting/regulatory-related decisions. The surveys will also attempt to gather information that can be used to assess vendor satisfaction with the verification process, the value placed on verification by vendors and others, and that will quantify any added efficiencies or benefits (either cost or time) that verification provides to innovative technologies entering the environmental marketplace. The information collected during the surveys will allow the ETV program to further confirm its valuable role in encouraging the use of improved environmental technologies, as well as provide information that can be used to refine or redirect future verification efforts. These surveys are complemented by an ongoing Web site survey designed to assess customer satisfaction with ETV's web site, as well as ongoing efforts to develop additional case studies highlighting various potential impacts, or outcomes, associated with the use of verified technologies.

OBJECTIVE: IMPROVE COMPLIANCE

By 2008, maximize compliance to protect human health and the environment through compliance assistance, compliance incentives, and enforcement by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated, and achieving a 5 percent increase in the number of regulated entities making improvements in environmental management practices. (Baseline to be determined for 2005.)

Non-Compliance Reduction

- In 2006 Through monitoring and enforcement actions, EPA will increase complying actions, pollutant reduction or treatment, and improve environmental management practices (EMP).
- In 2005 Through monitoring and enforcement actions, EPA will increase complying actions, pollutant reduction or treatment, and improve environmental management practices (EMP).
- In 2004 EPA focused its enforcement actions in areas with the greatest potential to protect human health and the

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environment by identifying significant environmental, public health, and compliance problems. The enforcement actions taken required defendants to reduce, treat, or eliminate illegal emissions and discharges, establish improved EMPs that will help to detect and prevent potential future non-compliance. The level of inspections and investigations maintained an effective deterrent to violations of federal environmental laws.

- In 2003 EPA directed enforcement actions to maximize compliance and address environmental and human health problems.
- In 2002 Based upon one measure, this APG was not met.
- In 2001 EPA directed enforcement actions to maximize compliance and address environmental and human health problems.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|----------------|
| Millions of pounds of pollutants required to be reduced through enforcement actions settled this fiscal year.(core optional) | 660 | 261 | 600 | 1,000 | | | M pounds |
| Number of EPA inspections conducted (core required) | 17,812 | 17668 | 18,880 | 21,000 | | | inspections |
| Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. | | | | | 300 | 300 | million pounds |
| Percentage of concluded enforcement cases requiring that pollutants be reduced, treated, or eliminated and protection of populations or ecosystems. | | | | | 30 | 30 | Percentage |
| Percentage of concluded enforcement cases requiring implementation of improved environmental management practices. | | | | | 60 | 60 | percentage |
| Number of inspections, civil investigations and criminal investigations conducted. | | | | | 18,500 | 18,500 | insp&inv. |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. 4 billion | FY 2006 Request 3.8 billion | |
|--|--------------------|--------------------|--------------------|--------------------|------------------------------------|-----------------------------------|--------------------|
| Dollars invested in improved env. performance or improved EMP as a result of concluded enforcement actions (i.e., injunctive relief and SEPs) | | | | | | | Dollars |
| Percentage of regulated entities taking complying actions as a result of on-site compliance inspections and evaluations.. | | | | | 10 | 29 | percentage |
| Percent of concluded enforcement actions that require an action that results in environmental benefits and/or changes in facility management or information practices. | 79 | 77 | 63 | 83 | | | Percent |
| Number of Criminal Investigations | 482 | 484 | 471 | 425 | | | Investigation s |
| Number of Civil Investigations | 368 | 541 | 344 | 455 | | | Investigation s |

Baseline: Protecting the public and the environment from risks posed by violations of environmental requirements is basic to EPA's mission. To develop a more complete picture of the results of the enforcement and compliance program, EPA has initiated a number of performance measures designed to capture the results of monitoring and concluded enforcement cases. These results address complying actions, pollutant reduction, and improved environmental management practices. Baselines to be determined in 2005.

Compliance Incentives

- In 2006 Through self-disclosure policies, EPA will increase the percentage of audits or other actions reducing pollutants or improving EMP.
- In 2005 Through self-disclosure policies, EPA will increase the percentage of facilities reducing pollutants or improving EMP.
- In 2004 EPA offered an incentive program of reduced or eliminated penalties for facilities that conduct voluntary self-audits, and report and correct violations. These incentives are often used in targeted initiatives directed at specific

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industrial sectors and are occasionally developed in collaboration with the industry or industry associations. Since 2001, the incentives programs have helped return thousands of facilities to compliance, furthering environmental stewardship through the provision of information, incentives and innovative approaches to reduce or eliminate pollution.

- In 2003 Increased opportunities through new targeted sector initiatives for industries to voluntarily self-disclose and correct violations on a corporate-wide basis.

- In 2002 The number of facilities that participated in voluntary self-audit programs, disclosed and corrected violations greatly exceeded the target.

- In 2001 EPA increased opportunities through targeted sector initiatives for industries to use one of the self-disclosure policies.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------|
| Percentage of audits or other actions that result in the reduction, treatment, or elimination of pollutants and the protection of populations or ecosystems. | | | | | 5 | 5 | percentage |
| Percentage of audits or other actions that result in improvements in environmental management practices. | | | | | 10 | 60 | Percentage |
| Pounds of pollutants reduced, treated, or eliminated, as a result of audits or other actions. | | | | | 0.25 million | 0.25 million | Pounds |
| Dollars invested in improved environmental performance or improved environmental management practices as a result of audits or other actions. | | | | | 2 million | 2 million | dollars |
| Facilities voluntarily self-disclose and correct violations with reduced or no penalty as a result of EPA self-disclosure policies. | 1754 | 1467 | 848 | 969 | | | Facilities |

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Baseline: EPA developed the Audit Policy to encourage corporate audits and subsequent correction of self-discovered violations. The Small Business Policy and the Small Community Policy also promote voluntary self-disclosure and correction of violations. These performance measures show the results of these incentive policies such as pollutant reductions and improved environmental management practices. Baselines to be determined in 2005.

Regulated Communities

In 2006 Through compliance assistance, EPA will increase the understanding of regulated entities, improve Environmental Management Practices, and reduce pollutants.

In 2005 Through compliance assistance, EPA will increase the understanding of regulated entities, improve Environmental Management Practices, and reduce pollutants.

In 2004 EPA continues to increase the regulated community's understanding of environmental regulations and improve facility environmental management practices by providing direct and practical assistance through the Compliance Clearinghouse, Compliance Assistance Centers, and direct assistance at the facility level or through state and local workshops.

In 2003 Increased the regulated community's compliance with environmental requirements through their expanded use of compliance assistance. The Agency continued to support small business compliance assistance centers and developed compliance assistance tools such as sector notebooks and compliance guides.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|--|---------|---------|---------|---------|------------|---------|------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Number of facilities, states, technical assistance providers or other entities reached through targeted compliance assistance (core optional) | | | 721,000 | 731,000 | | | Entities |
| Percentage of regulated entities seeking assistance from EPA-sponsored CA centers and clearinghouse reporting that they improved EMP as a result of their use of the centers or the clearinghouse. | | | | | 60 | 65 | percentage |
| Percentage of regulated entities receiving direct compliance assistance from EPA reporting that they improved EMP as a result of EPA assistance. | | | | | 50 | 30 | Percentage |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|------------|
| % of regulated entities seeking assistance from EPA-sponsored CA centers and clearinghouse reporting that they reduced, treated, or eliminated pollution as a result of that resource. | | | | | 25 | 40 | Percentage |
| % of regulated entities seeking assistance from EPA-sponsored CA centers and clearinghouse reporting that they increased their understanding of env. rqmts. as a result of their use of the resources. | | | | | 75 | 75 | Percentage |
| % of regulated entities receiving direct CA from EPA reporting that they increased their understanding of env. rqmts. as a result of EPA assistance. | | | | | 65 | 80 | percentage |
| % of regulated entities receiving direct assistance from EPA reporting that they reduced, treated, or eliminated pollution, as a result of EPA assistance. | | | | | 25 | 10 | percentage |

Baseline: EPA provides compliance assistance to the regulated community and partners. EPA supports initiatives targeted towards compliance in specific industrial and commercial sectors with certain regulatory requirements. Compliance assistance ranges from on-line Compliance Assistance Centers to direct on-site assistance. Baseline to be determined in 2005.

OBJECTIVE: IMPROVE ENVIRONMENTAL PERFORMANCE THROUGH POLLUTION PREVENTION AND INNOVATION

By 2008, improve environmental protection and enhance natural resource conservation on the part of government, business, and the public through the adoption of pollution prevention and sustainable practices that include the design of products and manufacturing processes that generate less pollution, the reduction of regulatory barriers, and the adoption of results-based, innovative, and multimedia approaches.

ANNUAL PERFORMANCE GOALS AND MEASURES

Reducing PBTs in Hazardous Waste Streams

In 2006 Reduce pollution in business operations.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|----------------|--------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Number of pounds reduced (in millions) in generation of priority list chemicals from 2001 baseline of 88 million pounds | | | | | | 1.2 million | pounds |

Baseline: In FY 2001, the baseline of priority chemicals in waste streams was established at 88 million pounds. The FY 2008 goal is a reduction of 8.8 million pounds (10%).

Innovation Activities

In 2006 Performance Track members collectively will achieve an annual reduction of: 600 million gallons in water use; 2.5 million MMBTUs in energy use; 15,000 tons of solid waste; 20,000 tons materials reduced; 6,000 tons of air releases; and 10,000 tons in water discharges, compared with 2001 results.

In 2005 Performance Track members collectively will achieve an annual reduction of: 600 million gallons in water use; 2.5 million MMBTUs in energy use; 15,000 tons of solid waste; 6,000 tons of air releases; and 10,000 tons in water discharges, compared with 2001 results.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|---|---------|---------|---------|---------|------------|---------|------------------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Specific annual reductions in 5 media/resource areas: water use, energy use, solid waste, air releases, and water discharges. | | | | | 5 | 6 | media reductions |

Baseline: For Performance Track, the baseline year is 2001. Performance will be measured against the 2001 baseline annual reduction of 475 M gallons of water use, 0.24 million MMBTUs of energy use, 150,000 tons of solid waste, 1,113 tons of air releases, 6,870 tons of water discharges, and an increase of 2,154 tons of materials.

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Reduction of Industrial / Commercial Chemicals

- In 2006 Prevent, reduce and recycle hazardous industrial/commercial chemicals and improve environmental stewardship practices.
- In 2005 Prevent, reduce and recycle hazardous industrial/commercial chemicals and improve environmental stewardship practices.
- In 2004 FY 2004 data will be avail. in FY 2006 to verify whether the quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2004, (normalized for changes in industrial production) was reduced by 200 million pounds, or 2%, from 2002.
- In 2003 FY 2003 data will be avail. in 2005 to verify the quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2003, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2002.
- In 2002 The quantity of TRI pollutants released, disposed of, treated or combusted for energy recovery in 2002 (normalized for changes in industrial production) increased by 366 million pounds of TRI pollutants, or 2% from 2001.
- In 2001 No conclusions can be drawn regarding changes in TRI Non-recycled wastes from calendar year 2000 to calendar year 2001 without data.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|--------------------|
| Reduction of TRI non-recycled waste (normalized) | -464 M Lbs | 366 M Lbs | Data Lag | | | | lbs |
| Alternative feed stocks, processes, or safer products identified through Green Chemistry Challenge Award | | | | 429 | | | Prod/proc (cum) |
| Quantity of hazardous chemicals/solvents eliminated through the Green Chemistry Challenge Awards Program | | | | 460 | | | lbs |

ANNUAL PERFORMANCE GOALS AND MEASURES

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|----------------|
| For eco-friendly detergents, track the number of laundry detergent formulations developed. | | | | 38 | | | formulations |
| Percent reduction in Toxics Release Inventory (TRI) reported toxic chemical releases at Federal Facilities. | | | | | 32% | 40% | Releases (Cum) |
| Percent reduction in both Toxics Release Inventory (TRI) chemical releases to the environment from the business sector per unit of production ("Clean Index") | | | | | 20% | 28% | Releases (Cum) |
| Percent reduction in TRI chemicals in production-related wastes generated by the business sector per unit of production ("Green Index"). | | | | | 10% | 14% | Waste (Cum) |
| Reduction in overall pounds of pollution. | | | | | 34 Billion | 42 billion | Pounds (Cum) |
| Millions of dollars saved through reductions in pollution. | | | | | 134 Million | \$170 million | Dollars (Cum) |
| Annual cumulative quantity of water conserved. | | | | | 1.5 billion | 1.5 billion | Gallons |
| Billions of BTUs of energy conserved. | | | | | 143 Billion | 175 billion | BTUs (Cum) |

Baseline: The baseline for the TRI non-recycled wastes measure is the amount of non-recycled wastes in 2001 reported FY2003. The baseline for eco-friendly detergents is 0 formulations in 1997. The baseline for the alternative feed stocks / processes measure is zero in 2000. The baseline for the quantity of hazardous chemicals / solvents measures is zero pounds in the year 2000. The baseline for the hospitals measure is zero in FY2001. The baseline reference point for reductions of pollution and conservation of BTUs and water will be zero for 2003. The baseline for money saved will be 2003. The baseline for reduction in CO2 will be zero for 1996. The baseline for the Clean and Green Index would be 2001 levels. The baseline for chemical releases is 2001 level. The

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baseline for chemical production related wastes is 2001 level. Note: Several output measures were changed to internal-only reporting status in 2005. Annual Performance measures under development for EPA's Environmentally Preferable Purchasing program for the FY2006 Annual Performance Plan.

OBJECTIVE: BUILD TRIBAL CAPACITY

Through 2008, assist all federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.

Tribal Environmental Baseline/Environmental Priority

- In 2006 Assist federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.
- In 2005 Assist federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.
- In 2004 86% of Tribes have an environmental presence (e.g. one or more persons to assist in building Tribal capacity to develop and implement environmental programs)
- In 2003 In 2003, AIEO evaluated non-Federal sources of environmental data pertaining to conditions in Indian Country to enrich the Tribal Baseline Assessment Project.
- In 2002 A cumulative total of 331 environmental assessments have been completed.
- In 2001 Baseline environmental assessments were collected for 207 Tribes.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|--|---------|---------|---------|---------|------------|---------|----------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Increase tribes' ability to develop environmental program capacity of federally recognized tribes that | | | | | 90 | 89 | % Tribes |

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| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------------|
| have access to an environmental presence. | | | | | | | |
| Develop or integrate EPA and interagency data systems to facilitate the use of EPA Tribal Enterprise Architecture information in setting environmental priorities and informing policy decisions. | | | | | 5 | 10 | Systems |
| Eliminate data gaps for environmental conditions for major water, land, and air programs as determined through the availability of information in the EPA Tribal Enterprise Architecture. | | | | | 5 | 17 | % Data Gap |
| Increase implementation of environmental programs in Indian country by program delegations, approvals, or primacies issued to tribes and direct implementation activities by EPA. | | | | | 159 | 169 | Programs |
| Increase the number of EPA-approved quality assurance plans for tribal environmental monitoring and assessment activities. (Baseline 243) | | | | | 271 | 280 | Plans |
| Increase the percent of tribes w/ multimedia programs reflecting traditional use of natural resources. | | | | | 5 | 30 | % Agreements |
| Environmental assessments for Tribes. (cumulative) | 207 | 331 | | | | | Tribes, etc. |
| Non-federal sources of environmental data pertaining to conditions in Indian Country. | | | 20 | | | | Data sources |

Baseline: There are 572 tribal entities eligible for GAP program funding. These entities are the ones for which environmental assessments of their lands will be conducted.

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

Office for Administration and Resources Management

Energy Consumption Reduction

- In 2006 By 2006, EPA will achieve a 20% energy consumption reduction from 1990 in its 21 laboratories. A 20% energy consumption reduction from 1990 represents progress towards the 2010 requirement of a 25% energy consumption reduction from the 1990 base. The reductions include Green Power purchases.
- In 2005 By 2005, EPA will achieve a 20% energy consumption reduction from 1990 in its 21 laboratories which is in line to meet the 2005 requirement of a 20% reduction from the 1990 base. This includes Green Power purchases.
- In 2004 (Actual data available in 2005.) By 2004, EPA will achieve a 16% energy consumption reduction from 1990 in its 21 laboratories which is in line to meet the 2005 requirement of a 20% reduction from the 1990 base. This includes Green Power purchases.
- In 2003 The Agency achieved 15.3% energy consumption reduction from 1990 in its 21 laboratories.

| Performance Measures | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | |
|--|---------|---------|---------|---------------------|------------|---------|---------|
| | Actuals | Actuals | Actuals | Actuals | Pres. Bud. | Request | |
| Cumulative percentage reduction in energy consumption (from 1990). | | | 15.3 | Data avail. In 2005 | 20 | 20 | Percent |

Baseline: In FY 2000, energy consumption of British Thermal Units (BTUs) per square foot is 320,000 BTUs per square foot.

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

Office of Environmental Information

Information Exchange Network

- In 2006 Improve the quality, comparability, and availability of environmental data for sound environmental decision-making through the Central Data Exchange (CDX).
- In 2005 Improve the quality, comparability, and availability of environmental data for sound environmental decision-making through the Central Data Exchange (CDX).
- In 2004 Significant progress has been made in developing the Exchange Network over the past three years. The numbers of Exchange Network nodes and data flows have increased making it possible to exchange and integrate large volumes of environmental data to enhance environmental decision-making. A key component to the Network is EPA's Central Data Exchange (CDX) and its ability to facilitate data exchange and information sharing. As a result, EPA has experienced a tremendous growth in users of CDX and the Network.
- In 2003 Continued to improve data access to ensure that decision makers have access to the environmental data that EPA collects and manages to make sound environmental decisions while minimizing the reporting burden on data providers.
- In 2002 The Central Data Exchange (CDX), a key component of the environmental information exchange network, became fully operational and 45 states are using it to send data to EPA; thereby improving data consistency with participating states.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| States using the Central Data Exchange (CDX) to send data to EPA. | | 45 | 49 | | | | States |
| CDX will fully support electronic data exchange requirements for major EPA environmental systems, enabling faster receipt, processing, and quality checking of data. | | | | | 12 | 18 | Systems |

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|----------------|
| States will be able to exchange data with CDX through state nodes in real time, using new web-based data standards that allow for automated data-quality checking. | | | | | 40 | 50 | States |
| States, tribes, laboratories, and others will choose to use CDX to report environmental data electronically to EPA, taking advantage of automated data quality checks and on-line customer support. | | | | | 20,000 | 47,000 | Users |
| Customer help desk calls are resolved in a timely manner. | | | | | 96 | 96 | Percent |
| In preparation for increasing the exchange of information through CDX, implement four data standards in 13 major systems and develop four additional standards in 2003. | | | 7 | | | | Data Standards |
| Number of private sector and local government entities, such as water authorities, will use CDX to exchange environmental data with EPA. | | | | 7,050 | | | Entities |
| CDX offers online data exchange for all major national systems by the end of FY 2004. | | | | 13 | | | Systems |
| Number of states using CDX as the means by which they routinely exchange environmental data with two or more EPA media programs or Regions. | | | | 49 | | | States |

Baseline: The Central Data Exchange program began in FY 2001.

Data Quality

In 2006 EPA will improve the quality and scope of information available to the public for environmental decision-making.

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

- In 2005 EPA will improve the quality and scope of information available to the public for environmental decision-making.
- In 2004 EPA developed a management report on options for enhancing access to the next Report on the Environment by making it easily available electronically.
- In 2003 The public had access to a wide range of Federal, state, and local information about local environmental conditions and features in an area of their choice.
- In 2002 100% of the publicly available facility data from EPA's national systems accessible on the EPA Website is part of the Integrated Error Correction Process; thereby reducing data error.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|----------|
| Publicly available facility data from EPA's national systems, accessible on the EPA Website, will be part of the Integrated Error Correction Process. | | 100 | | | | | Percent |
| Establish an improved suite of environmental indicators for use by EPA's programs and partners in the Agency's strategic planning and performance measurement process. | | | | | 1 | 1 | Report |
| Responders to the baseline questionnaire on customer satisfaction on the EPA Website report overall satisfaction with their visit to EPA.GOV. | | | | | 60 | | Percent |
| Window-to-My Environment is nationally deployed and provides citizens across the country with Federal, state, and local environmental information specific to an area of their choice. | | | Nationally | | | | Deployed |
| Establish the baseline for the suite of indicators that are used by EPA's programs and partners in the Agency's strategic planning and performance measurement process. | | | | 1 | | | Report |

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

Baseline: An effort to develop a State of the Environment report based on environmental indicators was initiated in FY 2002.

Information Security

In 2006 OMB reports that all EPA information systems meet/exceed established standards for security.

In 2005 OMB reports that all EPA information systems meet/exceed established standards for security.

In 2004 EPA has made significant progress over the last 4 years in improving its information security program. For example, EPA succeeded for a second year in achieving 100% intrusion detection, and the Agency's compliance with OMB's security program criteria increased from 75% in FY 2003 to 91% in FY 2004.

In 2003 OMB reported that all EPA information systems meet/exceed established standards for security.

In 2002 Completed risk assessments on the Agency's critical infrastructure systems (12), critical financial systems (13), and mission critical environmental systems (5).

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Critical infrastructure systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document. | | 12 | | | | | Systems |
| Critical financial systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document. | | 13 | | | | | Systems |
| Mission critical environmental systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document. | | 5 | | | | | Systems |

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|---------|
| Percent compliance with criteria used by OMB to assess Agency security programs reported annually to OMB under Federal Information Security Management Act/Govt. Information Security Reform Act. | | | 75 | 91 | 75 | 90 | Percent |
| Percent of intrusion detection monitoring sensors installed and operational. | | | 75 | 100 | | | Percent |

Baseline: In FY 2002, the Agency started planning an effort to expand and strengthen its information security infrastructure.

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

Office of the Chief Financial Officer

Strengthen EPA’s Management

- In 2006 Strengthen EPA's management services in support of the Agency's mission while addressing the challenges included in the President's Management Agenda
- In 2005 Strengthen EPA's management services in support of the Agency's mission while addressing the challenges included in the President's Management Agenda
- In 2004 EPA met pre-established Agency or Government-wide performance goals.
- In 2003 EPA made progress to strengthen its management services and support the President's Management Agenda in the areas of workforce planning and financial management.
- In 2002 EPA prepared and submitted its FY 2001 financial statements and received a clean audit opinion.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals Goal Met | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------------------|--------------------|--------------------|-----------------------|--------------------|--------------------|
| Agency audited Financial Statements are timely, and receive an unqualified opinion. | | 1 | 1 | | 1 | 1 | Finan statement |
| The number of financial and resource performance metrics where the Agency has met pre-established Agency or Government-wide performance goals. | | | | 14 | 14 | 14 | Metrics |

Baseline: The Agency's audited FY 2004 Financial Statements will be submitted on time to OMB and receive an unqualified opinion.

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

Office of Inspector General

Fraud Detection and Deterrence

- In 2006 In 2006, the OIG will improve Agency business and program operations by identifying 240 recommendations, potential savings and recoveries equal to 150 percent of the annual investment in the OIG, 108 actions for better business operations, and 80 criminal, civil, or administrative actions reducing risk or loss of integrity.
- In 2005 In 2005, the OIG will improve Agency business and operations by identifying 240 recommendations, potential savings and recoveries equal to 150 percent of the annual investment in the OIG, 102 actions for better business operations, and 80 criminal, civil, or administrative actions reducing risk or loss of integrity.
- In 2004 The OIG exceeded its annual targets except it only achieved a 48% potential dollar return on its budget.
- In 2003 In the Annual Performance Report, our results for this APG were combined with the results for the APG on Audit and Advisory Services.
- In 2002 OIG is promoting partnering relationships across governmental entities for collaborative goal setting planning performance measurement evaluation and resource sharing for greater economies of scale. OIG in collaboration w/PCIE produced an environmental compendium a web enabled catalogue of federal

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|---|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------------|
| Number of improved business practices and systems. | | | | 133 | 102 | 108 | Improvements |
| Number of criminal, civil, and administrative actions. | | | | 108 | 80 | 80 | Actions |
| Number of business recommendations, risks, and best practices identified. | | | | 390 | 240 | 240 | Recommendations |
| Return on the annual dollar investment in the OIG. | | 120 | 856 | 48 | 150 | 150 | Percent |

ANNUAL PERFORMANCE GOALS AND MEASURES

ENABLING SUPPORT PROGRAMS

Baseline: In FY 2002, the OIG established a baseline of 150 business recommendations, 70 improved business practices, and 50 criminal, civil, and administrative actions for improving Agency management; and a 100% potential dollar return on the investment in the OIG from savings and recoveries.

Audit and Advisory Services

In 2006 In 2006, the OIG will contribute to improved environmental quality and human health by identifying 105 environmental recommendations, risks, best practices, or opportunities for improvement; contributing to the reduction or elimination of 28 environmental or infrastructure security risks; and 50 actions influencing environmental improvements or program changes.

In 2005 In 2005, the OIG will contribute to improved environmental quality and human health by identifying 95 environmental recommendations, risks, best practices, or opportunities for improvement; contributing to the reduction or elimination of 23 environmental or infrastructure security risks; and 45 actions influencing environmental improvements or program changes.

In 2004 The OIG exceeded the targets for this goal by including measures of results in promoting economy and efficiency and preventing and detecting fraud, waste, and abuse in EPA programs and operation in addition to measures of environmental recommendations and improvement.

In 2003 Improved environmental quality and human health by identifying 312 environmental recommendations, risks, and best practices; contributing to the reduction of 92 environmental risks, and 185 actions influencing positive environmental or health impacts.

| Performance Measures | FY 2001 Actuals | FY 2002 Actuals | FY 2003 Actuals | FY 2004 Actuals | FY 2005 Pres. Bud. | FY 2006 Request | |
|--|--------------------|--------------------|--------------------|--------------------|-----------------------|--------------------|-----------------|
| Number of environmental risks reduced. | | | 92 | 45 | 23 | 28 | Risks |
| Number of environmental actions. | | | 185 | 49 | 45 | 50 | Improvements |
| Number of environmental recommendations, risks, and best practices identified. | | | 312 | 116 | 95 | 105 | Recommendations |

Baseline: In FY 2002, the OIG established a baseline of: 75 recommendations, best practices and risks identified contributing to improved Agency environmental goals; 15 environmental actions; and the reduction of 15 environmental risks.