

# PROTECTING THE ENVIRONMENT AND OUR EMPLOYEES



PERFORMANCE HIGHLIGHTS 2006



# Contents

Introduction	2
Management Systems Improve Safety, Health, and Environmental Performance	3
EPA Strengthens Its Internal Audit and Evaluation Program	6
Sustainable Building Design Places EPA on Solid Footing	8
EPA Promotes Energy Efficiency and Green Power	10
A Better Approach to Transportation	12
EPA Promotes Electronics Stewardship	14
EPA Keeps Employees Safe and Ready to Go	16
EPA Aims for Zero Injuries and Illnesses	18
Acknowledgments	20

# Introduction

For more than three decades, the public has relied on the U.S. Environmental Protection Agency (EPA) to safeguard the nation's environment and protect human health. To accomplish this mission, EPA has established numerous environmental and health-based policies and has worked to educate industry and the general public about the importance of environmental stewardship. As a matter of principle, it is essential for EPA to "walk the talk," and that is why the Agency strives to ensure that its own offices and laboratories operate in a manner that minimizes environmental impacts and protects employees. In 2006, EPA made impressive progress on these fronts and engaged in strategic planning at the Agency, Office, and Division levels to ensure that the Agency will (1) continue to serve as a leader in the areas of environmental stewardship and worker safety and (2) satisfy priorities and expectations put forth by Congress, the White House, and the Office of Management and Budget.

This report, which summarizes EPA's safety, health, and environmental management (SHEM) accomplishments for calendar year 2006, provides information on the Agency's efforts to:

- Integrate environmental management systems and implement safety and health management systems at EPA offices and laboratories;

- Enhance the Agency's SHEM Audit and Evaluation Program;

- Reduce energy use and promote the use of renewable energy;

- Incorporate sustainable features into EPA buildings;

- Green the Agency's vehicle fleet and encourage the use of mass transit;

- Reduce environmental impacts associated with the purchase, use, and disposal of electronic equipment;

- Enhance EPA's preparedness by ensuring that employees will be kept safe if they are called upon to respond to emergencies; and

- Reduce work-related injuries and illnesses.

We are proud of the progress we made in 2006, and we look forward to implementing new environmental stewardship initiatives and strengthening our commitment to worker safety in the future.



**Luis A. Luna**

Assistant Administrator

Office of Administration and  
Resources Management



# Management Systems Improve Safety, Health, and Environmental Performance

**E**PA has established environmental management systems (EMS) at 32 of its major offices and laboratories and has committed to piloting safety and health management systems (SHMS) at select EPA locations. By doing so, EPA is striving to integrate environmental accountability and worker safety and health considerations into all levels of the Agency's planning, management, and operational decisions.

## **EMS BUILDS ENVIRONMENTAL STEWARDSHIP**

Managers at the Agency's highest levels have long recognized the importance of demonstrating leadership in environmental stewardship. In support of that position, on October 16, 2006, EPA Administrator Stephen Johnson reiterated EPA's commitment to use EMS as the framework for reducing the Agency's environmental footprint. On that same day, Administrator Johnson issued a set of Agencywide EMS objectives, and on December 21, 2006, EPA's Environmental Executive followed up by releasing EMS targets and metrics that will be used to measure the

## Important Terms

EPA has established a variety of **safety, health, and environmental management (SHEM) programs** to promote environmental stewardship at EPA facilities; support a safe workplace; and ensure compliance with all applicable safety, health, and environmental regulations. Examples of EPA's SHEM programs include the SHEM Audit and Evaluation Program (discussed later in this report), environmental management systems (EMS), and safety and health management systems (SHMS).

**EMS**, which promotes the integration of environmental considerations throughout an organization's planning and operating activities, provides a framework for identifying environmental aspects, setting environmental objectives and targets, monitoring and reporting on performance, and better managing environmental aspects in order to foster continual improvements in environmental performance.

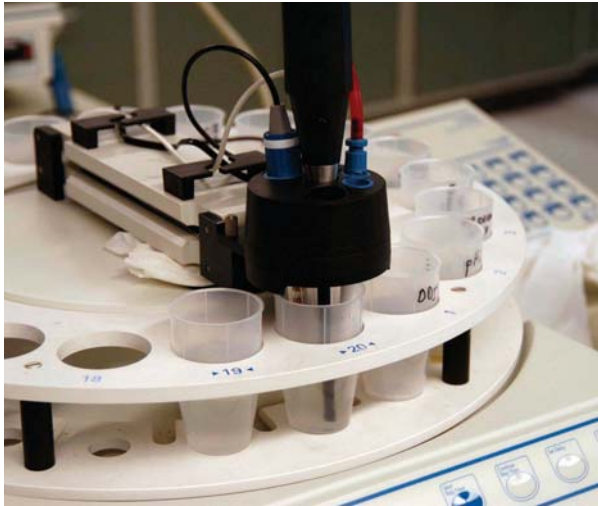
**SHMS** applies the same principles and processes that EMS does, except that it focuses on safety and health risks rather than environmental aspects. By placing emphasis on the early identification of risks, SHMS enables organizations to identify, manage, and resolve existing and emerging safety and health hazards before they result in injuries or illnesses.

## EMS Objectives for 2006 and 2007

The Agency's EMS objectives encompass the top priorities identified across EPA's EMS reporting locations and account for requirements listed in regulations, Executive Orders, and the Office of Management and Budget's Environmental Stewardship Scorecard.

The objectives cover the following areas:

- Energy management
- Vehicle use and transportation programs
- Paper consumption
- Affirmative procurement
- Chemical management
- Electronics stewardship
- Recycling
- Sustainable design



Innovative analytical equipment helps EPA laboratories reduce the amount of chemicals they use to evaluate environmental samples.

Agency's progress in meeting each EMS objective. Establishing Agencywide EMS objectives, targets, and metrics is a major milestone for EPA. By issuing them, the Agency has positioned itself to move ahead aggressively in 2007 with a clear understanding of EMS priority areas and a solid system for measuring its environmental performance.

At the facility level, the Agency's EMS reporting locations transitioned fully from the EMS implementation phase to the EMS integration/utilization phase in 2006. In the process, these locations expanded the number of people involved in EMS-related activities, began reporting on facility-level EMS objectives, and started using EMS as a framework for achieving strong environmental performance. Late in 2006, an external interagency workgroup known as the EMS Metrics Subgroup issued a new EMS scoring system that is designed to rate EMS performance at Federal facilities. Using the new scoring system, 56 percent of the Agency's EMS reporting locations achieved a green score (the highest ranking offered), and 44 percent scored yellow (the middle ranking). In the spirit of continual improvement, the Agency has launched a "Moving Toward Green" initiative to ensure that

## EMS Success Stories

In December 2006, representatives from the Agency's EMS reporting locations were asked to provide information on the benefits associated with EMS. Some representatives reported that having an EMS helps employees understand that environmental stewardship is everyone's responsibility—not just those who have job titles that require them to think about internal facility-related environmental issues. EPA staff also credited EMS with providing the framework and the muscle needed to support existing environmental initiatives, and at some EPA locations, representatives credited EMS as a mechanism that fosters collaboration among different EPA stakeholders. As for specific environmental benefits, the following provide examples of achievements that EMS has fostered:

The **Region 9 Office** has implemented FinePrint software on most of its computers, a change that has helped some employees reduce their paper consumption by more than half; and

The **Region 10 Laboratory**, which adopted a new method for analyzing organic compounds in 2006, reduced the amount of methylene chloride used per sample by 50 percent (using 2004 as a baseline).

all of its EMS reporting locations have the resources they require to improve their EMS programs and achieve green scores in the future.

### **SHMS—TAKING SAFETY AND HEALTH TO THE NEXT LEVEL**

The Agency intends to implement SHMS at several pilot sites in 2007 and to encourage additional sites to voluntarily implement SHMS as well. The Agency took several steps in 2006 to lay the groundwork for this goal. First, EPA performed a business case analysis, the results of which demonstrated that SHMS will:

Improve EPA's safety and health performance;

Advance EPA's "safety culture;"

Reduce costs associated with employee injuries and illnesses; and

Assist EPA in identifying, managing, and resolving existing and emerging safety and health hazards.

Secondly, EPA developed an Execution Plan describing the steps the Agency will take to support SHMS implementation. Thirdly, EPA completed a review of three SHMS models in an effort to identify the appropriate scope for the Agency's program, and lastly, EPA identified locations that are willing to pilot SHMS and developed a work plan that describes how Headquarters will support them with this endeavor.





# 6

## EPA Strengthens Its Internal Audit and Evaluation Program

As part of the Agency's comprehensive safety, health, and environmental management (SHEM) Audit and Evaluation Program, industrial hygienists, fire and life safety professionals, and environmental engineers visit each EPA office, laboratory, and research vessel on a 3- to 5-year cycle to determine whether they are in compliance with applicable regulations and laws. Compliance issues identified during these audits are documented as "audit findings" and local managers are required to develop Corrective Action Plans to resolve them. EPA's Office of Administration and Resources Management (OARM) tracks the audit findings in a database, reviews Corrective Action Plans, and ensures that each audit finding is resolved.

EPA's SHEM Audit and Evaluation Program is dynamic. Its scope changes as the Agency's need for self evaluation expands, and in recent years, EPA has initiated efforts to enhance the program. In 2006, EPA produced an Execution Plan, which explains how the improvements will be achieved, and took several concrete steps to set these improvements in motion.



The Ocean Survey Vessel *Bold* was one of 12 EPA entities evaluated under EPA's SHEM Audit and Evaluation Program in 2006.

### **RESOLVING OPEN AUDIT FINDINGS**

Following up on a June 2005 initiative, OARM worked closely with senior managers throughout 2006 to eliminate the Agency's backlogged open audit findings (i.e., those that have been open for more than 1 year). Thanks to these efforts, EPA resolved more than 100 backlogged open audit findings between June 2005 and December 2006. Also in 2006, EPA piloted a system that sends automatic e-mails to senior managers to reinforce the importance of resolving compliance issues expeditiously in the interest of protecting the environment and the Agency's workforce.

### **REALIGNING THE SHEM AUDIT AND EVALUATION PROGRAM**

EPA has started transitioning its SHEM Audit and Evaluation Program from a regulatory-based program to a performance-based program that is equipped to identify and assess the root causes that underlie compliance issues. By making this transition, EPA intends to rely more heavily on its auditing program to identify systemic problems



that require resolution. Laying the groundwork, EPA modified its overall audit approach in 2006 to emphasize OARM's commitment to working collaboratively with EPA facility managers in identifying sustainable solutions to compliance issues. Also in 2006, EPA developed new audit prioritization procedures that the Agency will use to rank the severity of audit findings, and provided training to a team of 20 auditors to educate them about the changes.

### **DEVELOPING SELF-ASSESSMENT TOOLS**

In 2006, EPA began development of a Self-Assessment Program that can be used to assess SHEM performance at the facility level. The internal self-assessments, which local managers will be expected to conduct annually, will augment the formal audits that occur once every 3 to 5 years under the SHEM Audit and Evaluation Program. The results will be used to determine whether EPA locations require assistance in meeting their compliance and programmatic responsibilities.

## **EPA's Underground Storage Tanks Meet Regulatory Requirements**

At the request of the President, EPA submitted a report (entitled Underground Storage Tank Compliance Strategy Report) to Congress in July 2006 that explains what the Agency is doing to ensure that its underground storage tanks (USTs) are in compliance with Federal, state, and local requirements. As noted in the report, 17 of the Agency's USTs are subject to the UST Compliance Act, all of which have been inspected by Federal or state organizations over the past 3 years and found to be in compliance with applicable regulations. The report also provides information about the mechanisms established within EPA to ensure compliance. For example, EPA's SHEM Audit and Evaluation Program accounts for USTs in its audit protocol, and EMS provides a framework for ensuring that EPA conducts internal facility-level inspections regularly.



# Sustainable Building Design Places EPA on Solid Footing



EPA Assistant Administrator Luis Luna signed an MOU at the White House Summit on Federal Sustainable Buildings on January 24, 2006.

**I**n January 2006, EPA became one of 16 Federal agencies to sign a Memorandum of Understanding (MOU) entitled “Federal Leadership in High Performance and Sustainable Buildings.” The MOU emphasizes the importance of designing, constructing, and operating Federal facilities in an energy-efficient and sustainable manner—objectives that EPA has been pursuing for many years. EPA spent the remainder of 2006 putting these goals into practice. For example, the Agency introduced stricter sustainability objectives for newly built (and recently renovated) offices and laboratories, and it continued to take

steps to ensure that EPA’s buildings minimize the amount of resources used. EPA’s two newest facilities—the Potomac Yard Office in Arlington, Virginia, and the Region 8 Office in Denver, Colorado—both of which were completed in 2006, are prime examples of the Agency’s commitment to sustainable building practices.

## **RAISING THE BAR BY SHOOTING FOR GOLD**

The U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED®) rating system serves as a nationally-accepted benchmark for rating the design, construction, and operation of green buildings. Under this program, buildings earn credits based on how well they address a variety of criteria, including water efficiency, energy efficiency, indoor chemical and pollutant source control, stormwater design, and building material selection. Buildings are awarded Certified, Silver, Gold, or Platinum LEED certifications depending on the number of credits they achieve. EPA uses the LEED system as a tool for evaluating the efficiency of the Agency’s buildings and for establishing sustainability goals for future construction and renovation projects. For several years, EPA required its newly constructed facilities to achieve LEED Silver certification, but in 2006, the Agency raised the bar by announcing that all of its newly initiated major building construction projects will now be expected to achieve at least LEED Gold certification. As of the end of 2006, three EPA facilities had attained the prestigious LEED Gold status and a fourth facility is expected to join the “gold club” in 2007.

## **FINDING GOLD IN EPA’S NEW REGION 8 OFFICE**

EPA completed construction of the new Region 8 Office in December 2006, but planning for this green building began nearly 3 years earlier. From

the start, EPA, in partnership with the U.S. General Services Administration (GSA), committed to designing a highly efficient, sustainable, and user-friendly facility that meets or exceeds performance expectations. To achieve these goals, the agencies organized a comprehensive, two-stage design competition, and teams from across the country worked to design a building that best incorporated EPA's green building objectives. As a result of this careful planning, EPA's Region 8 Office is now among the greenest buildings in the nation. The facility is on track to receive both the ENERGY STAR® building label and LEED Gold certification. EPA anticipates that its innovative and efficient design will save about 5 billion British thermal units (Btus) annually—enough to power more than 50 homes for an entire year.

The most impressive aspect of the building is the way in which it works with Denver's unique climate to save energy. Extensive daylighting and advanced lighting controls capitalize on the city's 300-plus days of sunshine per year. Also, the building's ventilation system uses Denver's cooler outside air, when appropriate, to cool the building, which saves energy and improves indoor air quality for the building's occupants. Lastly, the building's rooftop—the first green roof in Denver—features more than 19,000 square feet of drought-resistant vegetation and a 48-panel photovoltaic array that will provide 10 kilowatts of green power annually.

### **TAKING “GREEN” TO THE TOP IN VIRGINIA**

EPA's Potomac Yard Office in Arlington, Virginia, also serves as a success story for the Agency's green buildings initiative. The 650,000-square foot facility, which opened for occupancy during the summer of 2006, is already LEED Gold certified, and EPA expects it to receive the ENERGY STAR building label in 2007. In order to exceed the minimum standards for environmental performance,



EPA's Potomac Yard Office in Arlington, Virginia, opened in 2006.

the Agency installed high-efficiency mechanical and ventilation monitoring systems and controls and outfitted the facility with extensive daylighting in the office areas, efficient ENERGY STAR lighting fixtures and appliances, automatic daylight dimming controls, and occupancy sensors. In addition, the facility's two towers each feature green roofs that help to manage stormwater runoff and minimize the urban “heat island” effect. These green roofs, which are covered with drought-resistant native vegetation, help to limit building cooling loads, reducing Potomac Yard's peak cooling demand by 15 percent. Potomac Yard also features recycled aluminum and wheatboard counter tops, recycled-content carpet, corn-based fabrics, and systems furniture that meets EPA's Comprehensive Procurement Guidelines for recycled content. The Agency also took steps to provide superior indoor air quality by using low-volatile organic compound interior adhesives, paints, caulks, and sealants during construction. Because of its remarkable design, the facility was chosen as a finalist in GSA's 2006 Real Property Awards, and in January 2007, the building's architect received an Award of Merit from the Northern Virginia Chapter of the National Association of Industrial and Office Properties.



# EPA Promotes Energy Efficiency and Green Power

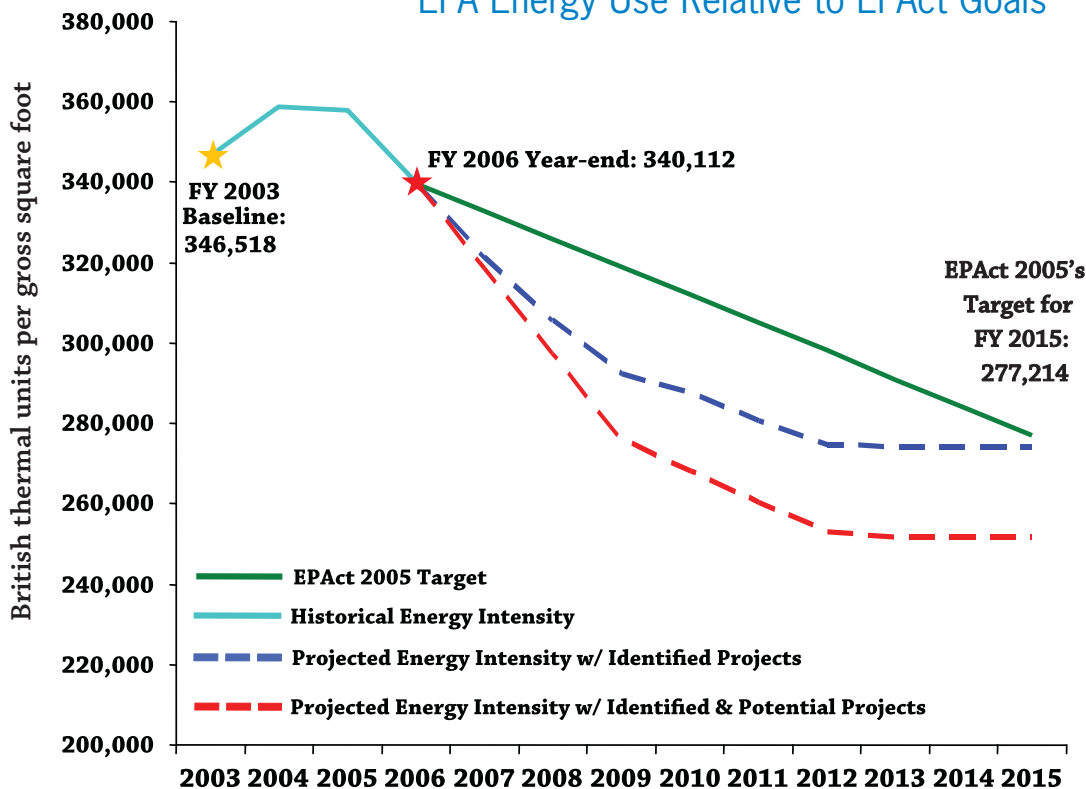
**D**ue to global climate change and energy security and supply concerns, facility energy use is at the forefront of the Agency's sustainability efforts. In 2006, EPA reinforced its commitment to efficient energy management, exceeded new Federal energy efficiency requirements, achieved an exclusive renewable energy milestone, and improved energy performance at its laboratories. Through these efforts, the Agency continued to minimize its overall energy

demands and reduce the environmental impacts associated with its electricity use.

The Energy Policy Act of 2005 (EPAAct 2005), signed into law in August 2005, requires all Federal agencies to reduce their energy intensity (a measure of total energy use per square foot) by 2 percent each year through fiscal year (FY) 2015. EPA far exceeded that goal in FY 2006, reducing energy intensity to 42 percent below its FY 2003 baseline, thanks to energy efficiency advancements and additional emissions reductions from extensive green power purchases, which the U.S. Department of Energy allowed agencies to subtract from total energy consumption in FY 2006.

In addition, on September 1, 2006, EPA became the first major Federal agency to offset 100 percent of its annual electricity use with green power. As of the end of the year, the Agency's green power purchases covered all of its facilities and accounted for more than 300 million kilowatt hours (kWh) of

EPA Energy Use Relative to EPAAct Goals



Note: This figure does not account for green power purchases. With green power purchases netted out, EPA's energy intensity was 324,602 Btu/GSF in FY 2003 and 189,658 Btu/GSF in FY 2006 (representing a 42 percent reduction).





green power per year—equivalent to the electricity used annually by nearly 28,000 homes. These purchases offset more than 600 million pounds of carbon dioxide annually, or the amount of carbon dioxide emitted by nearly 54,000 cars over the course of a year. Overall, EPA's green power purchases supported renewable power generation in 19 states and promoted the use of wind, biomass, geothermal energy, and biogas energy from landfill methane recovery.

Aside from renewable energy purchases, EPA reduced its overall energy intensity by 5 percent compared to FY 2005. This reduction was driven in large part by energy efficiency projects at several of the Agency's largest laboratories and the launch of the "ConservE" program, an Agencywide energy conservation initiative with mandatory energy use reduction goals for EPA laboratories. The ConservE program represents a shift from voluntary energy conservation to a new management approach incorporating required annual energy reductions and quarterly energy performance ratings. Facilities across the Agency responded to the challenge in FY 2006 and nearly two-thirds of EPA laboratories reduced energy use compared to FY 2005.

Significant savings at some of the Agency's largest laboratories led the way, including continued progress at EPA's Research Triangle Park (RTP)

campus in North Carolina, which accounts for about half of the Agency's overall annual energy use. In FY 2006, EPA attributed 60 percent of the Agency's total energy savings to the energy savings that RTP achieved through extensive building upgrades and improved energy management practices.

Another big saver, EPA's National Vehicle Fuel and Emissions Laboratory in Ann Arbor, Michigan, reduced annual energy use by 24 percent compared to FY 2005. It did so by introducing a series of extensive building upgrades and working closely with onsite contractors to optimize building performance. Many other facilities, including EPA's Region 3 Laboratory in Fort Meade, Maryland, achieved significant energy savings through proactive facility management that placed increased focus on ensuring that building systems and equipment were properly maintained and operating efficiently.

Looking to the future, EPA initiated the second phase of an energy master planning exercise in May 2006. As part of this effort, EPA evaluated all of the Agency's upcoming energy savings projects to determine how much energy each is likely to save. EPA engaged in this exercise to determine whether it is positioned to meet future EPA 2005 targets. As shown in the figure on page 10, the Agency stands poised to meet these targets.

# A Better Approach to Transportation

To reduce the environmental impact associated with the Agency's transportation needs, EPA continued to "green" its vehicle fleet in 2006 and to encourage employees to take public transportation.

## PROMOTING ALTERNATIVE FUELS AND FUEL-EFFICIENT VEHICLES

As stipulated by EAct 2005, all Federal agencies must ensure that at least 75 percent of their new non-exempt vehicle acquisitions are alternative fuel vehicles (AFVs), such as E-85 vehicles (which operate on a mixture of 85 percent ethanol with 15 percent gasoline) or CNG vehicles (which operate on compressed natural gas). Exceeding this expectation, 84 percent of EPA's covered 2006 acquisitions were AFVs, and by the end of FY 2006, the Agency possessed 387 E-85 vehicles and 15 CNG vehicles. These vehicles are classified as flex-fuel or bi-fuel vehicles, meaning that they can operate on alternative fuel or conventional fuel (gasoline).

In FY 2006, EPA vehicles used at least 19,229 gasoline gallon equivalents of alternative fuel in lieu of gasoline. Because the Agency believes this estimate is low, EPA introduced improvements to its fuel reporting system in 2006 to ensure the accuracy of future estimates (see sidebar on page 13). Also in 2006, EPA took steps to ensure that alternative fuels will represent a higher proportion of the Agency's future fuel purchases. Toward that end, the Agency mapped out existing E-85 filling stations and issued a policy memorandum to encourage the use of alternative fuels.



EPA pilot tested General Motors' hydrogen fuel cell vehicle in 2006.

To promote innovation, EPA also partnered with General Motors (GM) in 2006 to pilot test the use of a hydrogen fuel cell vehicle. The Agency used the vehicle to transport EPA employees to locations within the Washington, D.C. metropolitan area and generated feedback for GM in the process. The demonstration showed that the vehicle performed effectively in a metropolitan environment.

EPA is also moving in the right direction when it comes to improving the fuel economy of its fleet. Using FY 1999 as a baseline, the Agency succeeded in increasing the fuel economy of its light-duty vehicle acquisitions by a cumulative 5.5 miles per gallon by the end of FY 2006. By reaching this level, EPA has met the fuel-economy goal for light-duty acquisitions established under Executive Order 13149.

### GETTING EMPLOYEES OUT OF THE DRIVER'S SEAT

While reducing vehicle-related emissions generated on the job is important, EPA understands that reducing the emissions that employees generate by getting to and from work is critical as well. EPA has a Transit Subsidy Program to promote the use of mass transit, and in FY 2006, roughly 47 percent of the Agency's employees used public transportation. In some locations, the percentage was significantly higher. For example, at Headquarters, where employees have access to a well-developed public transit system consisting of trains, buses, and subways, participation in the Transit Subsidy Program was estimated to be 67 percent in FY 2006.



### Improving the Agency's Fuel Reporting System

EPA employees who use flex-fuel or bi-fuel AFVs can fill their tanks with alternative fuels or gasoline. The Agency has directed fleet managers to document which type of fuel is purchased in EPA's Automotive Statistical Tool (EPA-AST). To ensure timely and accurate reporting, EPA introduced a new reporting system in late 2006 referred to as the Environmental Compliance Dashboard. With this system, senior managers at each EPA facility are required to certify the information entered into EPA-AST quarterly. Red flags appear if information is missing, which prompts fleet managers to track down the missing data before drivers have forgotten the details associated with their fuel purchases. The new tool encourages near-real time reporting and introduces an additional layer of accountability for data collection—two features that are essential in ensuring the accuracy of data. To support the new system, EPA developed and deployed an online training program for fleet managers in 2006. Also, in an effort to assist others, EPA shared information about its new reporting system with the U.S. Department of Health and Human Services, and the Agency plans to continue disseminating information about lessons learned throughout 2007.

Also in FY 2006, the Agency forged an agreement with GSA to start obtaining monthly reports on the amount of fuel purchased (via GSA's Voyager credit card system) for AFVs that GSA leases to EPA. The data provided by GSA will be compared to that recorded in the EPA-AST database.

# EPA Promotes Electronics Stewardship

**E**PA's commitment to electronics stewardship advanced to a new level in 2006 as the Agency expanded the breadth of its electronics stewardship initiatives, gained support for these initiatives from a growing number of EPA facilities and employees, and started developing an electronics stewardship implementation plan. Throughout the year, EPA worked to educate employees (particularly property managers and information technology specialists) about their role in meeting the Agency's electronics stewardship goals. In addition, the Agency succeeded in encouraging more EPA facilities to participate in the Federal Electronics Challenge (FEC)—a voluntary partnership program that supports Federal agencies in their efforts to (1) purchase electronics with environmental attributes, (2) reduce the impact of operating and maintaining electronic products, and (3) reuse or recycle equipment that has reached the end of its useful life. Nearly all of EPA's targeted facilities were participating in the FEC by the end of 2006.



## GREENING EPA'S ELECTRONICS PURCHASES AND OPERATIONAL PRACTICES

Throughout 2006, EPA's Office of Acquisition Management worked on establishing Blanket Purchase Agreements (BPAs) for computers, laptops, monitors, and servers. The new BPAs, which go into effect in early 2007, identify specific "green" characteristics that products must possess in order to be considered for the BPA award. For example, certain BPAs require that equipment contain fewer hazardous materials, feature the ENERGY STAR label, contain post-consumer recycled plastic or renewable/bio-based materials, incorporate materials and designs that facilitate end-of-life recycling, and/or include documentation to educate users about appropriate power management settings. In addition, the BPAs state that products must be registered through the Electronic Products Environmental Assessment Tool, a system designed to help purchasers evaluate, compare, and select desktop computers, notebooks, and monitors based on their environmental attributes.

Numerous EPA facilities made progress in extending the useful life of their computers, implementing power management strategies, and ensuring that ENERGY STAR settings are enabled so computers do not waste energy. For example, the Region 5 Office in Chicago, Illinois, upgraded memory on 175 computers in 2006 in an effort to keep them operational. As an example of energy savings, the Region 3 Office in Philadelphia, Pennsylvania, reduced the electricity used by its computers over the course of two and a half years by an estimated 364,470 kWh by implementing a "sleep" mode for computer monitors. Also in 2006, EPA progressed in its efforts to develop Agencywide guidance on power management requirements and a 4-year replacement cycle for computers.



### MANAGING OBSOLETE ELECTRONICS

EPA strives to ensure that all of its excess electronic equipment is disposed of in an environmentally friendly manner—granting it a second life through donation or recycling it through a qualified recycler. Many of the Agency’s computers found a second life in public schools across the country in 2006 when EPA donated them through Computers for Learning (CFL), a program that provides computers to schools and educational nonprofits in need. Through CFL and other initiatives, EPA Headquarters donated 60 pieces of computer equipment to two local elementary schools, the Region 4 Office donated 85 computer systems to area schools, and EPA’s Research Triangle Park facility donated 500 pieces of equipment to more than a dozen local organizations. For some of the school donations, EPA attached a request asking the schools to dispose of the equipment in an environmentally friendly manner when it is no

longer useful, and in some cases, EPA offered to help the schools identify a qualified recycler.

Many EPA facilities participated in the 2006-2007 Electronics Reuse and Recycling Campaign, a challenge issued by the Office of the Federal Environmental Executive to Federal agencies to donate and recycle excess or surplus electronics. During the campaign, these facilities put forth an intensified effort to gather and recycle surplus equipment. EPA’s Research Triangle Park was recognized for its successful recycling of 65,604 pounds of equipment through the campaign. Additionally, the Agency’s Recycling Electronics and Asset Disposition contract provides another mechanism for EPA facilities to recycle outdated equipment in an environmentally sound manner. In 2006, EPA processed at least 96 tons of electronics equipment through this contract.



EPA facilities participated in the Electronics Reuse and Recycling Campaign in 2006.

# EPA Keeps Employees Safe and Ready to Go

In recent years, the Agency has played an increasingly important role in responding to natural and man-made emergencies and disasters. During such events, EPA employees mobilize quickly to affected areas to minimize potential environmental impacts and to protect the public from harm. Given the important role that the Agency plays, it is essential for EPA to maintain a high level of preparedness and to work diligently to ensure that the health and safety of its employees will be protected if they are called upon to respond to local or national incidents. In 2006, the Agency made several important strides in this regard.

## PLANNING FOR PANDEMIC INFLUENZA

Health experts have warned that a global influenza pandemic could occur in the future. Concern about this possibility has increased with the emergence of the H5N1 virus (a type of bird flu that has the potential to spread to humans). In the event of a bird flu outbreak or a human influenza pandemic, EPA would be called upon to protect the nation's drinking water and wastewater infrastructure and to assist other agencies in cleaning up contaminated areas. Thus, continuing EPA operations during a pandemic is imperative. To prepare for such a scenario, EPA developed a draft pandemic influenza plan in March 2006 that describes how the Agency will protect its

employees and indicates what mission-related responsibilities EPA will be expected to perform if an influenza outbreak occurs. The plan discusses the importance of educating employees about proper hygiene practices, developing policies to support "social distancing," providing protective equipment where appropriate, and working with Federal health agencies to provide vaccines and antiviral medication as they become available. In 2007, the Agency will develop a guidance document that provides more detailed information about EPA's pandemic planning activities.

## PROTECTING EPA'S EMERGENCY RESPONDERS

In 2006, the Agency participated in the National Response Team's Worker Safety and Health Subcommittee to ensure that EPA's emergency response personnel will be adequately protected if they are called upon to assist in incidents of national significance that require multi-agency action. Also in 2006, safety and health managers and On-Scene Coordinators representing EPA's ten Regions, Headquarters, the Environmental Response Team, and the National Decontamination Team formed a workgroup, which meets monthly, to discuss issues related to EPA's emergency response community. For example, the workgroup has already identified several topics that it plans to explore and resolve in the near future, including which requirements should be used to properly fit and secure respiratory equipment and which procedures should be established to ensure that antibiotics will be available to responders who are exposed to bioagents. Also in 2006, EPA organizations across the nation began implementing the Agency's Emergency Responder Health and Safety Manual, a document that promotes consistency in (1) the way EPA emergency responders are trained and monitored and (2) the type of work practices and protective equipment they use in the field.





EPA continued to provide emergency response support to the Gulf Coast throughout 2006 in response to Hurricanes Katrina and Rita.

### **PREPARING “GO BAGS” FOR THE RESPONSE SUPPORT CORP**

In addition to the Agency’s highly trained emergency responders, many EPA employees participate in the Agency’s Response Support Corps (RSC)—a group established in September 2003 to augment the onsite support that EPA’s emergency response personnel provide during incidents of national significance. When needed, RSC members voluntarily leave their offices to provide support in impacted areas. While some RSC members perform field work, others assist in command centers by providing administrative or communication support or technical guidance. In 2006,

OARM worked with EPA’s Office of Emergency Management to prepare “go bags” that contain basic protective equipment for RSC volunteers who work at EPA Headquarters.

# EPA Aims for Zero Injuries and Illnesses

**E**PA employees confront a variety of occupational hazards on the job. For example, all employees have the potential to slip, trip, or fall at work; laboratory workers can be exposed to toxic chemicals; and field workers can incur injuries when climbing trees, collecting aquatic samples, or contacting poisonous plants or insects. Despite these hazards, EPA's injury and illness rates are low compared to other Federal agencies—a testament to the strength of the Agency's occupational safety and health programs and the safety and health consciousness of the Agency's employees. Nevertheless, EPA is aiming to bring the injury and illness rate as close to zero as possible. To meet this goal, EPA launched an Injury and Illness Prevention Program in 2006 to identify common workplace hazards and mitigate them before they cause harm.

## LEARNING FROM ACCIDENTS AND NEAR MISSES

Near misses (also referred to as close calls) serve as warning signals that reveal potentially hazardous workplace conditions that could, if left unmitigated, cause actual injuries and illnesses. In July 2006, OARM's Assistant Administrator announced that all EPA locations would be required to start recording and investigating their near misses and instituting corrective actions to mitigate underlying hazards. At the same time, EPA distributed a new incident reporting form and established a hotline for employees to call to report their near misses and

**Slip? Trip? Fall? Call!**

Did you know that slips, trips, and falls cause nearly half of the injuries that occur at EPA? Help us all stay a little safer by reporting every injury, illness, and even the "near misses" such as unsafe conditions or falls that don't result in an injury. When we take action to prevent workplace injuries and illnesses, we can better protect each other as we protect the environment. The Safety, Health and Environmental Management Division has set up a hotline to make reporting easier than ever. **Call (877) 301-SAFE to report injuries, illnesses, and near misses.** Note: This number is for reporting purposes only. As always, if there is a medical emergency, please call 911.

Be a Part of Our Safety Net  
(877) 301-SAFE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EPA developed posters in 2006 to support its Injury and Illness Prevention Program.

actual injuries. In addition, EPA offered training to safety and health managers on near miss identification and mitigation in September 2006.

Also in 2006, OARM started collecting and analyzing all of the Agency's injury and illness data quarterly rather than annually. OARM uses these



data to analyze how many incidents occur at each EPA location and which categories of injuries and illnesses are most prevalent. The data are presented to EPA's senior managers and safety and health managers, who use the information to determine whether targeted actions are needed to mitigate specific hazards.

After learning that slips, trips, and falls are a leading source of injury, EPA developed posters to raise awareness about this problem and instituted the "Clear the Clutter" Challenge to encourage employees to rid their workspaces of safety hazards. Data analysis also revealed that vehicular accidents are on the rise at EPA, a finding that management believes can best be addressed through driver safety training. Responding to this need, EPA piloted an online driver safety training program in late 2006 and intends to start delivering the training in 2007 to about 800 employees who drive on government business two or more days per week.

### **BROADENING EPA'S SAFETY NET**

In 2006, EPA launched an awareness campaign to educate employees about common workplace hazards, to inform them of EPA's emergency medical response procedures and automated external defibrillator training program, and encourage them to report injuries and illnesses. The Agency launched the campaign in June 2006 at a safety fair held at EPA Headquarters. During the fair, employees engaged in safety- and health-themed games and visited informational booths. Also in 2006, EPA distributed safety and health outreach materials to its major offices and laboratories.



Employees participate in the "Clear the Clutter Putter" game during a safety fair held at EPA Headquarters in June 2006.

## ACKNOWLEDGEMENTS

EPA's Office of Administration and Resources Management would like to acknowledge the following staff for their contributions to this report and their tireless commitment to improving the Agency's safety, health, and environmental performance:

Assistant and Regional Administrators;

Safety, health, and environmental managers;

Real estate, architecture, engineering, and sustainable facilities personnel;

Energy, facility, fleet, and laboratory managers;

Pollution prevention, EMS, and recycling coordinators; and

Purchasing and contract officials.







