

US EPA ARCHIVE DOCUMENT



# Data, Planning and Results

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## Compliance and Enforcement Annual Results - FY2006

EPA's National Compliance and Enforcement program focused on important environmental problems during Fiscal Year (FY) 2006, and produced significant results in these priority areas. These results have produced significant outcomes in terms of environmental and public health benefits. Seventy-four percent (74%) of pollution reductions and seventy-one percent (71%) of pollution prevention and control investments obtained in 2006 were a result of the Agency's focus on priority air and water pollution problems.

As a result, our air is cleaner, the water we drink is purer, contaminated land is being cleaned up, acid rain and discharges of raw sewage have been reduced, and wetlands are being protected. EPA continues to provide a strong and effective compliance and enforcement program as demonstrated by the number and range of activities carried out in FY 2006.

During FY 2006, EPA's criminal enforcement program helped to successfully prosecute several high impact cases that secured large sentences, enhanced deterrence and reduced environmental pollution.

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### Annual Results for National Enforcement Priorities

- Air Toxics
- Concentrated Animal Feeding Operations
- Combined Sewer Overflows and Sanitary Sewer Overflows
- New Source Review
- Petroleum Refining
- Stormwater

### Key Air Pollution Problems

	Problems	Pollutants Reduced (lbs.)	Investments in Pollution Control (\$)
<b>NSR/ PSD</b>	Acid Rain, Respiratory Illness, Heart Disease	135 million	\$310 million
<b>Air Toxics</b>	Cancer, Birth Defects	0.4 million	\$1 million
<b>Petroleum Refining</b>	Acid Rain, Respiratory Illness, Heart Disease	292 million	\$2,073 million
<b>Total</b>		427.4 million	\$2,384 million

### Key Water Pollution Problems

	Problems	Pollutants Reduced (lbs.)	Investments in Pollution Control (\$)
<b>Stormwater</b>	Contaminated Runoff	195 million	\$ 150 million

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<b>CAFO</b>	Animal Wastes	12 million	\$ 10 million
<b>CSO/SSO</b>	Raw Sewage	26 million	\$ 930 million
<b>Total</b>		233 million	\$1,090 million

FY 2006 also saw the longest environmental crimes trial (seven months) since the program was established in 1982, in which the Atlantic States Cast Iron Pipe Company and four individual defendants were found guilty of numerous violations. Sentencing is scheduled for January 2007.

EPA's [Superfund enforcement program](#) secured private party commitments for site cleanup, promoted redevelopment and reuse of contaminated sites, and promoted cleanup of contaminated property at federal facilities.

EPA is also preventing pollution and helping the regulated community to understand its environmental responsibilities as demonstrated by EPA's compliance and enforcement [Government Performance and Results Act \(PDF\)](#) (6 pp, 98K, [About PDF](#)) results that include compliance assistance, monitoring and inspections, and incentive programs to promote self-policing and improvement in environmental management practices.

For more information, see our numbers at a glance and results charts and read the details of cases we have resolved in 2006 and the innovative compliance assistance and incentives we have offered.

#### **Other FY2006 Accomplishments**

- [National Enforcement Investigations Center and Homeland Security](#)
- [Environmental Justice](#)
- [Report a Violation](#)

[November 15, 2006 Presentation by Granta Nakayama \(PDF\)](#) (16 pp, 393K, [About PDF](#))

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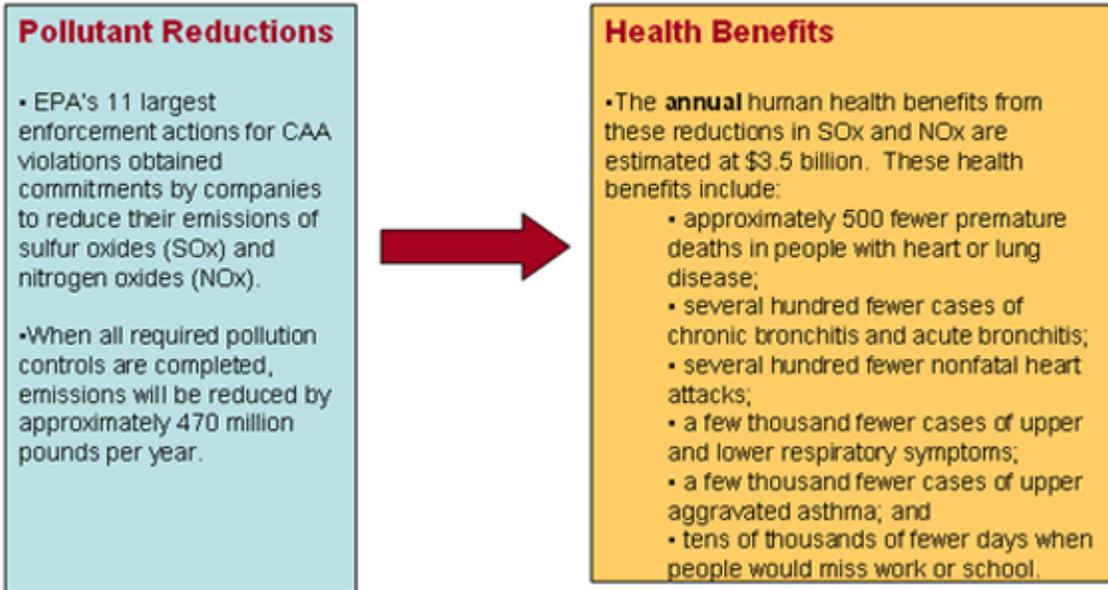
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# Compliance and Enforcement Annual Results: Significant Public Health and Environmental Benefits

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## FY2006 Compliance & Enforcement Annual Results Air Enforcement Cases Yield Environmental and Human Health Benefits



Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;

### National Direct Environmental Benefits Estimated Environmental Benefits from Enforcement Actions with Direct and/or Direct Response/Corrective Action

Categories

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Pollutants Reduced or Treated (pounds)	876,453,720
Pollutants Reduced or Treated (pounds) as a result of audit agreements or other actions	54,274
Contaminated Soil to be Cleaned-up (cubic yards)	14,964,101
Contaminated Water to be Cleaned-up (cubic yards)	1,292,309,371
Linear Feet of Wetland Stream Miles Protected/Mitigated (feet)	108,948
Wetlands Protected/Mitigated (acres)	5,565
Number of People Receiving Cleaner Drinking Water	7,625,715

**Annual Results by Fiscal Year:**

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# Compliance and Enforcement Annual Results: Effective Enforcement and Compliance Programs

Enforcement/Compliance Output	FY 2006 Result	Note	FY2006 Annual Results Topics
Civil Judicial Referrals	286	Highest total in past five fiscal years	<ul style="list-style-type: none"> <li>FY2006 Home</li> <li>Press Release</li> <li>Results Charts</li> <li>Numbers at a Glance</li> <li>Enforcement Highlights</li> </ul>
Civil Judicial Conclusions	173	Substantial increase over FY 2005 (157)	<ul style="list-style-type: none"> <li>Air Highlights</li> <li>Water Highlights</li> <li>Land Highlights</li> <li>Cross-Media Highlights</li> </ul>
Administrative Penalty Complaints	4647	Highest total ever	<ul style="list-style-type: none"> <li>Compliance Highlights</li> </ul>
Final Administrative Penalty Orders	4624	Highest total ever	<ul style="list-style-type: none"> <li>Assistance</li> <li>Incentives</li> </ul>
Compliance inspections/Evaluations	23,000	Tied for highest total in past ten fiscal years	<ul style="list-style-type: none"> <li>Results by Region</li> </ul>
Number of Facilities Resolving Voluntary Disclosures	1475	Highest total in past five fiscal years	
Number of Companies Resolving Voluntary Disclosures	551	Highest total in past five fiscal years	
Entities Reached Through Direct EPA Compliance Assistance	878,000	Highest total in past five fiscal years	
Assistance Provided by On-line Assistance Centers	1,879,000	Highest total in past five fiscal years	

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# Compliance and Enforcement Annual Results: Criminal Cases

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The strategy of the criminal enforcement program is to pursue more "high impact" cases which have greater environmental and public health significance and a deterrent impact on illegal corporate and individual behavior. Not every criminal enforcement case will be high impact and not every high impact case will necessarily produce a large fine or jail sentence, since sentencing results normally fluctuate from year to year and court to court.

### Judicially Mandated Projects

The \$29 million amount of judicially mandated projects secured in FY 2006 is the highest in the three years that the criminal enforcement program has compiled and reported data on this category. Judicially Mandated Projects represent the monetary value of environmentally beneficial projects or other activities that a judge orders defendants to pay for or conduct themselves. Although part of a defendant's formal sentence, they are distinct from, and in addition to, fines and restitution.

### Incarceration

The 154 years of total jail time assessed, although lower than the year before (which included the two largest jail sentences for environmental crimes in history) was the seventh largest annual figure in the history of the criminal enforcement program. FY 2006 incarceration results were impacted by Supreme Court decisions making the Sentencing Guidelines discretionary rather than mandatory. Overall, the aggregate jail sentences were about 35 years lower in FY 2006 due to the downward variations from the guidelines.

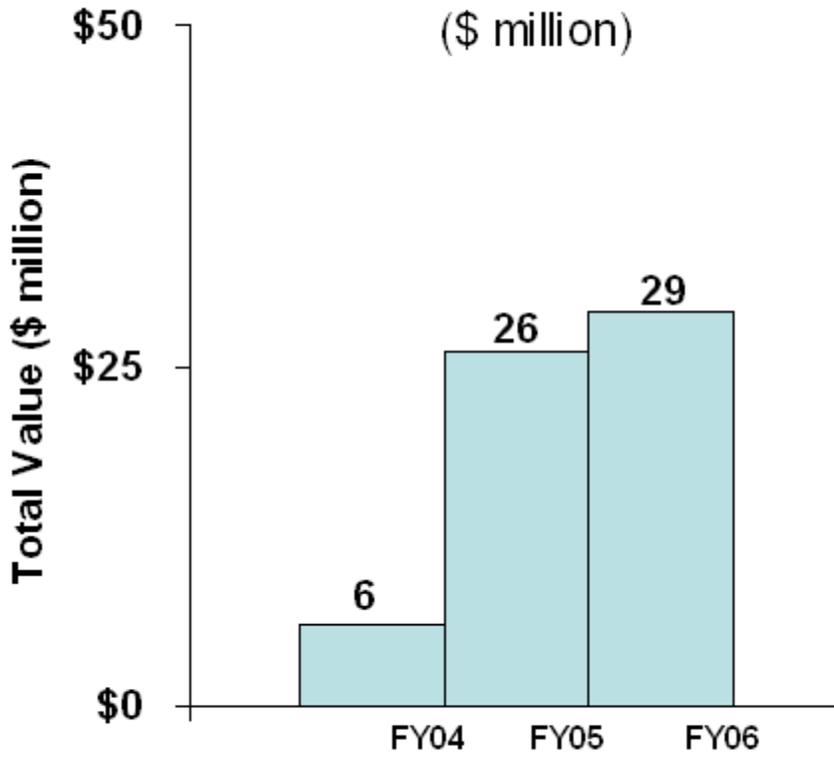
### Fines and Restitution

The \$43 million aggregate level of fines and restitution in FY 2006 reflects that there were no cases with over \$5 million in criminal fines and restitutions assessed. By contrast, FY 2005, the year with the 3rd highest level of fines and restitution in history, had four cases which by themselves totaled \$68 million in fines and restitution - AAR Contractors, Evergreen Marine, Motiva, and Bouchard Transportation.

### FY2006 Annual Results Topics

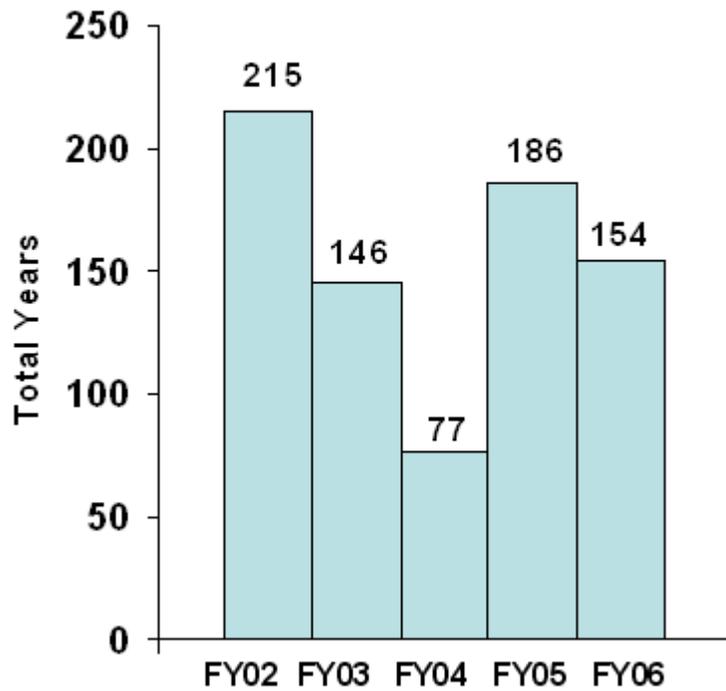
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## Judicially Mandated Projects (\$ million)

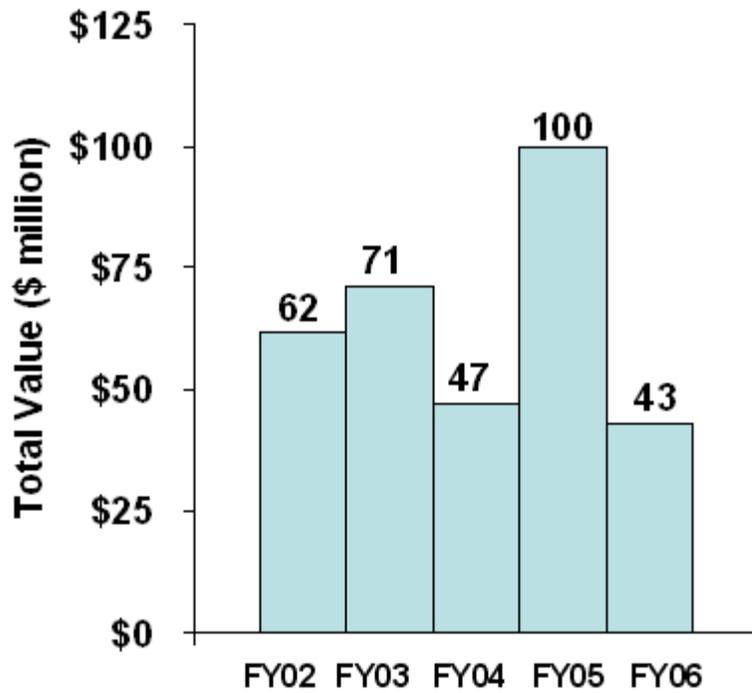


FY2006 Data Source: Criminal Case Reporting System, October 28, 2006

## Years of Incarceration



### Value of Fines and Restitution (\$ million)



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# Compliance and Enforcement Annual Results: Superfund Enforcement

EPA's Superfund enforcement program achieves prompt site cleanup and maximum liable party participation in performing and paying for cleanup in ways that promote environmental justice and fairness.

Fiscal year 2006 (FY 06) activities focused on:

- [Promoting redevelopment and reuse of contaminated sites](#)
- [Maximizing private party funds for cleanup](#)
- [Ensuring long-term stewardship at cleaned up sites](#)
- [Requiring federal agencies to clean up contamination at their facilities](#)

### Promoting Redevelopment and Reuse of Contaminated Sites



In FY 06 the Office of Enforcement and Compliance Assurance (OECA) promoted not only the cleanup but also the redevelopment and reuse of contaminated sites by defining and addressing liability concerns at such sites. OECA worked on new tools and promoted the use of pilot projects and innovative settlements to encourage the cleanup and redevelopment of contaminated sites.

This year, EPA entered into the first-ever agreement with a non-liable party to clean up the Many Diversified Interests, Inc. (MDI) Superfund site in Houston, Texas. The agreement with Clinton Gregg Investments, L.P. will save the Agency \$6.6 million in

on-site cleanup of lead-contaminated soil. It assures EPA that the buyer has sufficient funds to complete the cleanup and pay for the Agency's oversight costs. More information on the MDI Superfund site case and other land case highlights is available at [Land Highlights](#).

OECA will continue to develop new tools and policies to promote the cleanup and redevelopment of contaminated sites.

### Maximizing Private Party Funds for Cleanup

The federal Superfund statute authorizes EPA to retain and use funds received in settlements with potentially responsible parties (PRPs) to clean up sites. EPA retains these funds in site-specific accounts or "special accounts," which are sub-accounts within the Hazardous Substance Superfund Trust Fund. EPA maintains more than 500 special accounts. In FY 06 OECA engaged in several efforts to improve the Agency's tracking and management of special accounts.

### Ensuring Long-Term Stewardship at Cleaned Up Sites through Institutional Controls

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OECA assists EPA's efforts to ensure that institutional controls are and remain protective at sites by maximizing PRPs' participation in properly implementing, monitoring and enforcing institutional controls (such as restrictive covenants, restrictions to prevent access or digging) . By using available enforcement authorities and legal resources, OECA continues to:

- Integrate improvements in information and monitoring technologies into enforcement agreements
- Support the development of institutional control tools like statutory environmental covenants
- Apply lessons learned from the Agency's experience using institutional controls into the Agency's current activities

EPA continues to make progress implementing the [Strategy to Ensure Institutional Control Implementation at Superfund Sites \(PDF\)](#) (17 pp, 116K, [About PDF](#)) by systematically reviewing institutional controls at completed Superfund cleanups and increasing EPA's and States' capacity in and knowledge of institutional controls generally. In March of 2006, OECA issued the "[Enforcement First' to Ensure Effective Institutional Controls at Superfund Sites](#)" (PDF) (5 pp, 167K, [About PDF](#)) policy memorandum, which affirms EPA's policy of seeking maximum PRP participation in conducting cleanups, including the evaluation and implementation of institutional controls.

### **Requiring Federal Agencies to Clean Up Contamination at their Facilities**

EPA's federal facilities cleanup enforcement program got federal facilities to commit to address over 850 million cubic yards of contaminated soil, sediment and water at facilities they own or operate. This volume accounts for 65% of all cleanup commitments secured by EPA in FY2006. These cleanups will be done under EPA oversight and will make the facilities safer for their surrounding communities.

If you would like more information visit the [Federal Facilities Cleanup Enforcement Web page](#).

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**EPA FY2006**  
**Government Performance and Results**  
**Act (GPRA)**  
**Goal 5 & Select Goal 3 Measures**



**Prepared by the Office of Enforcement and Compliance Assurance**

**November 15, 2006**

## FY2006 Compliance & Enforcement Annual Results

### Government Performance and Results Act (GPRA) - Goal 5 Measures Monitoring and Enforcement

Measure Number	Measure Description	FY06 Target	FY06 Actual	Results
178	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. <sup>1</sup>	450M lbs.	890M lbs.	Exceeded target
179	% of concluded enforcement cases requiring that pollutants be reduced, treated, or eliminated. <sup>2</sup>	30%	18%	Below target
180	% of concluded enforcement cases requiring implementation of improved environmental management practices. <sup>3</sup>	65%	82%	Exceeded target

<sup>1</sup> Data Source: Integrated Compliance Information System (ICIS), October 28, 2006, and manual categorizations

<sup>2</sup> Data Source: ICIS, October 28, 2006, and manual categorizations

<sup>3</sup> Data Source: ICIS, October 28, 2006

# FY2006 Compliance & Enforcement Annual Results

Government Performance and Results Act (GPRA) - Goal 5 Measures

## Monitoring and Enforcement Continued

Measure Number	Measure Description	FY06 Target	FY06 Actual	Results
182	% of regulated entities taking complying actions as a result of on-site compliance inspections and evaluations. <sup>4</sup>	25%	16%	Below target
183	Dollars invested in improved environmental performance or improved environmental management practices as a result of concluded enforcement actions (i.e., injunctive relief and SEPs). <sup>5</sup>	\$4.1B	\$5.0B	Exceeded target

<sup>4</sup> Data Source: ICIS or manual reports from the Regions, October 28, 2006

<sup>5</sup> Data Source: ICIS, October 28, 2006

# FY2006 Compliance & Enforcement Annual Results

## Government Performance and Results Act (GPRA) - Goal 5 Measures Compliance Assistance

Measure Number	Measure Description	FY06 Target	FY06 Actual	Results
Percent of regulated entities receiving direct compliance assistance from EPA reporting that, as a result of the EPA assistance, they:				
988	Improved environmental management practices <sup>6</sup>	50%	74%	Exceeded target
992	Reduced, treated, or eliminated pollution <sup>7</sup>	15%	28%	Exceeded target

<sup>6</sup> Data Source: ICIS, October 28, 2006

<sup>7</sup> Data Source: ICIS, October 28, 2006

# FY2006 Compliance & Enforcement Annual Results

## Government Performance and Results Act (GPRA) - Goal 5 Measures Compliance Incentives

Measure Number	Measure Description	FY06 Target	FY06 Actual	Results
176	Pounds of pollutants reduced, treated, or eliminated, as a result of audits or other actions. <sup>8</sup>	0.4M lbs.	.05M lbs.	Below target

<sup>8</sup> Data Source: ICIS, October 28, 2006, and manual categorizations

# FY2006 Compliance & Enforcement Annual Results

Government Performance and Results Act (GPRA) - Goal 3 Measures

## Site Remediation Enforcement

Measure Number	Measure Description	FY06 Target	FY06 Actual	Results
285	Percentage of Remedial (RA) Starts initiated at sites that have known viable, liable parties where enforcement action was taken prior to start of the RA <sup>9</sup>	95%	100%	Exceeded target
078	Percent of cost recovery statute of limitation (SOL) cases addressed with total past costs > or equal to \$200,000 <sup>10</sup>	100%	100%	Met target

<sup>9</sup> Data Source: CERCLIS, October 28, 2006.

<sup>10</sup> Data Source: CERCLIS, October 28, 2006.



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# Compliance and Enforcement Annual Results: National Enforcement Investigations Center and Homeland Security Highlights

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## National Enforcement Investigations Center

The [National Enforcement Investigations Center](#), EPA's Forensics Science Division, is a state-of-the-art, fully accredited forensics center internationally recognized in forensic environmental chemistry. NEIC scientists, engineers, and environmental professionals provide expert support to both EPA's civil and criminal enforcement programs through compliance monitoring and engineering evaluations, forensic laboratory analysis, information management, computer forensics, and courtroom testimony.

### Support for National Enforcement Priorities

During FY 2006, NEIC continued providing scientific forensic support to the Enforcement Program's National Enforcement Priorities. For example, NEIC provided technical expert support to the civil enforcement program for two important components of the national petroleum refinery priority -- benzene National Emission Standards for Hazardous Air Pollutants (NESHAPs) and Leak Detection and Repair. NEIC supported compliance monitoring investigations, case development, and development of injunctive relief and settlement negotiations, including those associated with the recent agreements with ConocoPhillips, Exxon Mobil, Sunoco, and Valero. NEIC also provided support for the wet weather national priorities, including settlement negotiations support for the Environmental Management System (EMS) provision of the City of Dallas storm water control settlement.

### Application of Information Forensic Analysis Techniques to Compliance Investigations

Large-scale petrochemical manufacturing facilities can contain over 100,000 pieces of regulated process equipment which may leak air toxics and Volatile Organic Compounds (VOCs) to the atmosphere, thereby contributing to the formation of ground-level ozone. Leak detection and repair (LDAR) regulations affect almost all U.S. industry processes in which VOCs are used or manufactured. NEIC has expanded its investigation tools to include innovative information forensic techniques which allow previously-unexplored compliance areas to be evaluated in order to help identify noncompliance. For example, NEIC can model emissions from data collected onsite in order to evaluate the validity of company-reported emissions data.

NEIC innovation in leak detection and repair compliance investigations has encouraged several companies to enter global settlement negotiations to resolve both LDAR and other Clean Air Act compliance issues. As manufacturing facilities continue to rely more heavily on computerized processes for environmental monitoring and reporting, NEIC continues to develop specific techniques to collect and evaluate this detailed and often sizeable amount of data. As a result, NEIC

has expanded these techniques into other media and manufacturing sectors, including pharmaceuticals, polyvinylchloride (PVC) plants, cement processors, and other chemical manufacturing facilities.

### **EPA Forum on Environmental Measurements**

NEIC served on the EPA Forum on Environmental Measurements (FEM) Method Validation Team, which develops Agency-wide guidance for validating and peer reviewing EPA methods prior to publication for general use. During FY 2006, the Team produced the final document "Validation and Peer Review of U.S. Environmental Protection Agency Chemical Methods of Analysis" which was posted on EPA's website. The document provides Agency-wide guidance for EPA personnel who will evaluate the performance and suitability of new chemical methods of analysis before EPA publication. The method validation principles are based on current, international approaches and guidelines for intra-laboratory (single laboratory) and inter-laboratory (multiple-laboratory) method validation studies.

### **Homeland Security Program**

The Office of Enforcement and Compliance Assurance's Homeland Security Program (HSP) provides criminal investigative and scientific support, including forensic evidence collection at crime scenes involving hazardous materials and laboratory analysis, to other law enforcement agencies in response to suspected terrorist incidents. The HSP also provides intelligence gathering, analysis, and threat assessment assistance to the National Joint Terrorism Task Force and the Homeland Security Operations Center .

### **Homeland Security-related Training**

The HSP provides training in environmental crime investigations emphasizing forensics evidence collection techniques for crime scenes involving hazardous materials and drinking and wastewater infrastructure protection. During FY 2006, the Homeland Security Program National Counter Terrorism Evidence Response Team conducted three training events to meet the requirements of the Homeland Security Cross-Goal Strategy of the EPA Strategic Plan. The training focused on critical drinking water and wastewater treatment facilities infrastructure protection; response and recovery; communication and information; and the protection of EPA personnel.

The HSP also trained 65 EPA special agents during the first two of six scheduled "Hot Zone Forensic Training" courses for EPA criminal enforcement investigators. This two-year training program is designed to enhance the basic forensic skills and sampling capabilities of criminal enforcement special agents. These enhanced skills are expected to increase the quality of scientific evidence collected during the course of a criminal environmental investigation.

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### Integrating Environmental Justice Implementation into Enforcement and Compliance

Each of the Office of Enforcement and Compliance Assurance's (OECA) [National Enforcement and Compliance Program Priorities](#) has an environmental justice component in its performance-based implementation strategy. This will ensure that minority and/or low income groups and communities are not disproportionately placed at risk from environmental and/or human health threats, especially by the activities covered by the National Priorities.

### Environmental Justice Smart Enforcement Assessment Tool

For the last two years, OECA has been working on the development of the [Environmental Justice Smart Enforcement Assessment Tool](#) (EJSEAT). This tool will help us to consistently define areas and facilities with potential environmental justice concerns based on a set of health, environmental, compliance, and social demographics indicators. As of summer 2006, we have already developed a prototype version of the EJSEAT that is available for testing on our Online Targeting Information System (OTIS) Web site. The EJSEAT will not be considered final until we obtain successful internal and external peer review of the tool. Once the EJSEAT is fully functional, it will allow us (after the identification of areas with environmental justice concerns based on information available to EPA) to use race and income information to assess how OECA's actions affect areas with minority and/or income populations. The EJSEAT will also be very instrumental in the effective implementation strategies for our National Program Priorities.

### Enhancing the Public's Ability to Report Environmental Violations

In 2006, we developed our [Reporting Environmental Violations](#) Web page. This allows the public to help us protect our nation's environment by identifying and reporting environmental violations online. To expand our public outreach, and specially get the help of the Hispanic community, we created a [Spanish Reporting Environmental Violations](#) form to make it easy to Spanish-speaking citizens to submit their environmental "tips and complaints." Along with the Web page, we developed the [Reporting Environmental Violations brochure](#) in English and Spanish (Denunciando violaciones ambientales) which has helped us to better educate the public about environmental

crime and the need to report it. The information reported through this mechanism is referred to EPA environmental enforcement personnel or to the best appropriate regulatory authority that can best address the reported concerns.

### **International Chiefs of Police Resolution on Environmental Justice**

In order to advance environmental justice principles and objectives in the deliberations, meetings, and capacity building of external organizations (e.g., State associations, trade associations, the law enforcement community and stakeholder groups), a resolution on environmental justice was adopted by the full membership of the International Association of Chiefs of Police, a force of 19,000 police executives in more than 100 different countries. This effort assists in the recognition of the need to integrate environmental justice principles into environmental criminal enforcement practices, criminal case assessment and selection, and in the reduction of pollution around the globe. This effort will also assist in the reduction of crimes in communities with potential environmental justice concerns and educate a broad and diverse audience on the dangers of environmental crime, and the adverse impact on human health. Recently, Court TV featured an EPA criminal environmental enforcement case that involved the death of a child due to blood-lead poisoning. All facets of the investigation were presented, including the fact that the victim, family, and other residents lived in a community with a disproportionate number of environmental hazards, and were at the lower end of the sphere in opportunities for economic and educational advancement. This year EPA along with many other federal, state and local governments observed the fifth annual "[National Environmental Crime Prevention Week](#)." The week focused on increasing the awareness of environmental crimes, including numerous training sessions with a focus on environmental justice.

### **Applying Environmental Justice to Supplemental Environmental Projects**

OECA made a great effort to monitor and implement [Supplemental Environmental Projects \(SEPs\)](#) that reduce particulate emissions from wood heating appliances in low-income households and communities. During the year, the [Wood Heater Program](#) initiated SEPs with Fireplace Products International (FPI) and England 's Stove Works (ESW). The FPI SEP will result in annual particulate emissions reductions of 1.5 tons per year in EPA-Region 9. The ESW SEP will result in annual particulate emissions reductions of 2.2 tons per year in EPA-Region 3. The FPI SEP will replace 30 wood stoves in 30 low-income households in Whatcom County over a 26-month period. The ESW SEP will replace 44 stoves in 44 low-income households over a 26 month-period in Virginia and West Virginia . This will reduce heating costs by 50% for participating households. The SEP progress reports show that FPI replaced 19 wood stoves in 19 low-income homes over 13 months (63% completion in half the time). ESW replaced 33 wood stoves in 33 low-income houses since 3/12/2005 (75% completion).

### **Authorizing Tribal Governments to Conduct Inspections on Behalf of EPA**

By the beginning of fiscal year 2005 (9/30/04), the OECA had issued the [Guidance for Issuing Federal EPA Inspector Credentials to authorize Employees of State/Tribal Governments to Conduct Inspections on Behalf of EPA \(PDF\)](#) (97 pp, 1.4 MB, [About PDF](#)). This year, OECA issued 18 inspector credentials to tribal inspectors representing 10 tribal organizations under three EPA statutes (CWA, FIFRA and RCRA). The tribal organizations included: the Fond du Lac Band of Lake Superior Tribe; Mille Lacs Band of Ojibwe; Cheyenne River Sioux Tribe; Fort Peck Assiniboine and Sioux Tribes; Mandan, Hidatsa and Arikara Tribes; Standing Rock Sioux Tribe; Oglala Sioux Tribe; The Navajo Nation; Salt River Pima - Maricopa Indian Community; and the Yakama Nation.

### **Pesticides Inspector Spanish Language and Cultural Training**

As part of OECA's Pesticides Inspector Residential Training (PIRT), OECA held in August a Hispanic Culture/Spanish language session with focus on intensive Spanish language and cultural training.

## Information for Small and Minority Livestock Farmers

OECA developed eleven (11) special fact sheets for small and minority livestock farmers. The [Small Farms fact sheets](#) [EXIT Disclaimer](#) are posted under the Livestock and Poultry Environmental Learning Center Project. There will be several (3+) webcast features for extension educators and others who advise farmers to familiarize them with the fact sheets.

### Annual Results by Fiscal Year:

[FY2010](#) | [FY2009](#) | [FY2008](#) | [FY2007](#) | [FY2006](#) | [FY2005](#) | [FY2004](#) | [FY2003](#) | [FY2002](#) | [FY2001](#) | [FY2000](#) | [FY1999](#)



## Data, Planning and Results

You are here: [EPA Home](#) [Compliance and Enforcement](#) [Data, Planning and Results](#) [Results and Reports](#) [Annual Results](#) [Annual Results - FY2006](#) [Report a Violation](#)

# Compliance and Enforcement Annual Results: Report a Violation

EPA uses many approaches to identify potential violations. One approach is to enlist the public in identifying potential civil and criminal violations by asking them to provide information about potentially harmful environmental activities in their communities and in their workplaces. This has led to state and federal enforcement cases and has ultimately served environmental protection well.

One of the Office of Enforcement and Compliance Assurance's (OECA) priorities is to make the EPA website a more effective tool in securing tips and complaints from the public about possible civil and criminal violations of environmental law. In January, 2006, OECA unveiled a new Web-based tool ([www.epa.gov/tips](http://www.epa.gov/tips)) for the public to greatly expand the scope and quality of leads about possible environmental infractions. A new badge button on EPA's Homepage invites the public to report possible environmental violations or crimes. More than a million people a month who visit the Agency's home page ([www.epa.gov](http://www.epa.gov)) have the opportunity to help OECA protect human health and the environment by sharing any problems they see in their communities.

Between January 1, 2006 and September 30, 2006, submissions more than doubled (from 1,485 to 3,274). Almost 2,800 tips referred were referred to civil enforcement and almost 480 tips were referred to criminal agents. During that time period, seven tips resulted in either the initiation of a criminal case or the possibility of additional charges in existing criminal cases because the tips received related to already opened, ongoing investigations and provided even more useful information and witnesses.

OECA's Office of Criminal Enforcement, Forensics and Training (OCEFT) has the primary responsibility for evaluating and routing these leads as they come in. The system sorts tips based on their potential under criminal, civil or state jurisdiction. Here is a brief overview of how the process works:

1. A member of the public completes form
2. If the violation is described as being intentional, it goes to the criminal enforcement office for review by criminal investigation division desk officers
3. If the violation is described as being "accidental," it is automatically sent to EPA Regional offices for review as a civil case.
4. "Criminal tips" reviewed by desk officer are either:
  - a. Closed without further action if information submitted indicates that further investigation is not warranted
  - b. Sent to Criminal Program field offices for further review and potential criminal investigation
  - c. Sent to Regional offices if deemed potentially worthwhile for civil investigation but not criminal investigation
5. Tips that result in further enforcement response are tracked through the normal civil and criminal enforcement procedures.

### FY2006 Annual Results Topics

- FY2006 Home
- Press Release
- Results Charts
- Numbers at a Glance
- Enforcement Highlights
  - Air Highlights
  - Water Highlights
  - Land Highlights
  - Cross-Media Highlights
- Compliance Highlights
  - Assistance
  - Incentives
- Results by Region

Tips that will not result in further federal response may be referred to the states . States' responses to tips referred from EPA are managed within each State as a regulatory or law enforcement issue. EPA's goal with regard to referrals to states is to provide tips of the highest quality (containing as much useful information as possible) for review.

EPA's National Report a Violation Web site is still a work in progress. The continued implementation of the website will allow a more organized and coordinated effort between EPA's criminal and civil enforcement offices; more timely EPA responses to public reports of potential environmental violations; referral of complaint information to EPA's state and local counterparts; accurate internal EPA tracking of complaint information; and tracking of national trends in environmental law violations.

**Annual Results by Fiscal Year:**

[FY2010](#) | [FY2009](#) | [FY2008](#) | [FY2007](#) | [FY2006](#) | [FY2005](#) | [FY2004](#) | [FY2003](#) | [FY2002](#) | [FY2001](#) | [FY2000](#) | [FY1999](#)



Presentation by Granta Nakayama, Assistant Administrator  
Office of Enforcement and Compliance Assurance

# **EPA FY2006 Compliance & Enforcement Annual Results**



**Prepared by the Office of Enforcement and Compliance Assurance**

**November 15, 2006**



# FY2006 Compliance & Enforcement Annual Results

## FY2006 Highlights

- Enforcement actions are projected to reduce pollution by 890 million pounds, EPA's fourth highest year.
- Defendants will invest \$4.9 billion to reduce pollution and achieve compliance, EPA's second highest year.
- Over the past three years, EPA has reduced almost 3 billion pounds of pollution and required companies to invest almost \$20 billion in pollution control equipment.
- Approximately 74% of pollution reductions and 71% of pollution control investments focus on priority air and water pollution problems.
- Responsible parties will clean up 1.3 billion cubic yards of contaminated water and 15 million cubic yards of contaminated soil.



# FY2006 Compliance & Enforcement Annual Results

## Important Environmental Problems

EPA's compliance and enforcement program focuses on key environmental risks and noncompliance problems. EPA enforcement actions to address key air and water pollution problems:

- reduced pollution in water by 233 million pounds and by 427 million pounds in air
- required investment of over \$1 billion in water pollution control and almost \$2.4 billion in air pollution control



# FY2006 Compliance & Enforcement Annual Results

## Priority Water Pollution Problems

	Pollutants Reduced	Investments in Pollution Control
<b>Stormwater</b>	195 million lbs.	\$150 million
Stormwater runoff from large urban areas transports contaminants directly over land and into waterways		
<b>CAFO</b>	12 million lbs.	\$10 million
Water discharges and runoff from concentrated animal feedlots (during wet weather events), transport nutrients, bacteria, pesticides, antibiotics and hormones to local waterways		
<b>CSO/SSO</b>	26 million lbs.	\$930 million
Combined sewer overflows and sanitary sewer overflows discharge untreated sewage, industrial wastewater, and other pollutants into rivers, lakes, and oceans when wet weather events exceed the storage capacity of pipes and treatment plants		
<b>Total</b>	<b>233 million lbs.</b>	<b>\$1,090 million</b>



# FY2006 Compliance & Enforcement Annual Results

## Priority Air Pollution Problems

	Pollutants Reduced	Investments in Pollution Control
NSR/PSD Coal Fired Power Plants	135 million lbs.	\$310 million
New source review/prevention of significant deterioration requirements of the Clean Air Act require industrial facilities to obtain permits for plant modifications that increase air pollution emissions		
Air Toxics	0.4 million lbs.	\$1 million
Toxic air pollutants are known or suspected to cause cancer or other serious health effects such as reproductive or birth defects, or adverse environmental impacts		
Petroleum Refining	292 million lbs.	\$2,073 million
Air emissions from petroleum refineries such as volatile organic compounds, sulfur dioxide, nitrogen oxide, carbon monoxide and particulate matter contribute to respiratory illness and heart disease and can travel long distances before falling on land and water		
<b>Total</b>	<b>427.4 million lbs.</b>	<b>\$2,384 million</b>



# FY2006 Compliance & Enforcement Annual Results

## Air Enforcement Cases Yield Environmental and Human Health Benefits

### Pollutant Reductions

- EPA's 11 largest enforcement actions for CAA violations obtained commitments by companies to reduce their emissions of sulfur oxides (SO<sub>x</sub>) and nitrogen oxides (NO<sub>x</sub>).
- When all required pollution controls are completed, emissions will be reduced by approximately 470 million pounds per year.



### Health Benefits

- The **annual** human health benefits from these reductions in SO<sub>x</sub> and NO<sub>x</sub> are estimated at \$3.5 billion. These health benefits include:
  - approximately 500 fewer premature deaths in people with heart or lung disease;
  - several hundred fewer cases of chronic bronchitis and acute bronchitis;
  - several hundred fewer nonfatal heart attacks;
  - a few thousand fewer cases of upper and lower respiratory symptoms;
  - a few thousand fewer cases of upper aggravated asthma; and
  - tens of thousands of fewer days when people would miss work or school.

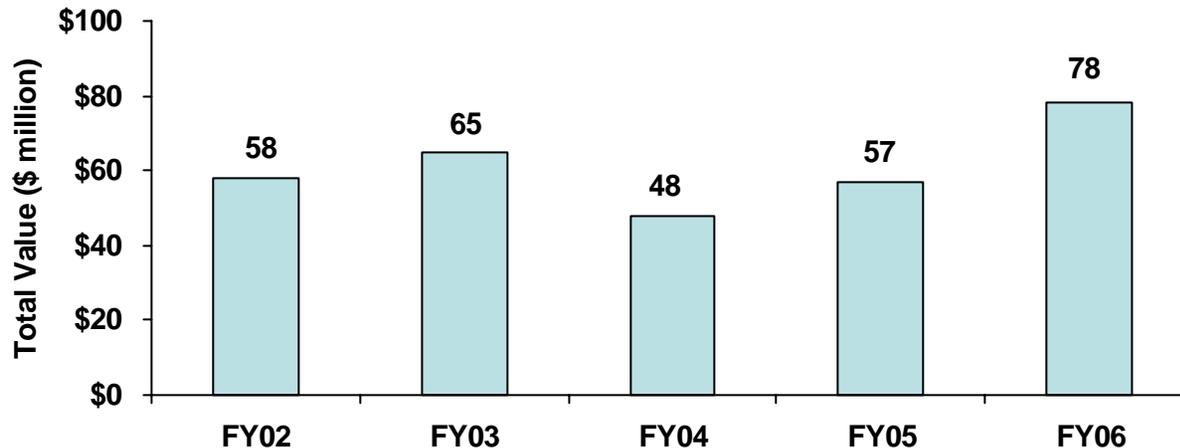


# FY2006 Compliance & Enforcement Annual Results

## Dollar Values of Concluded EPA Civil Enforcement Actions

### Five Year High

Environmentally Beneficial Projects  
(\$ million)



Note: In previous years, this information was referred to as value of SEPs.

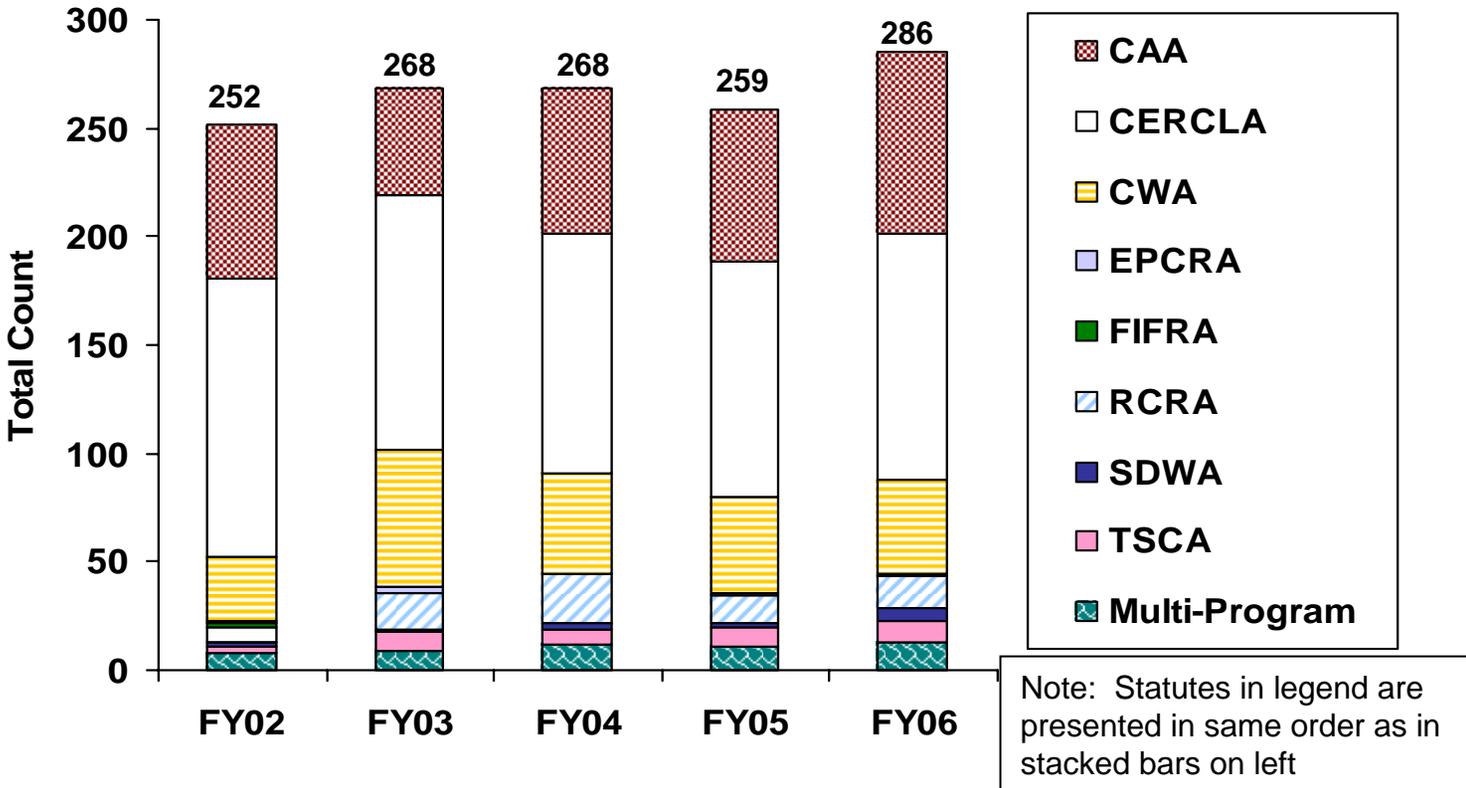
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY 2006 Compliance & Enforcement Annual Results

## EPA Referrals of Civil Judicial Enforcement Cases to Department of Justice – Total and by Statute



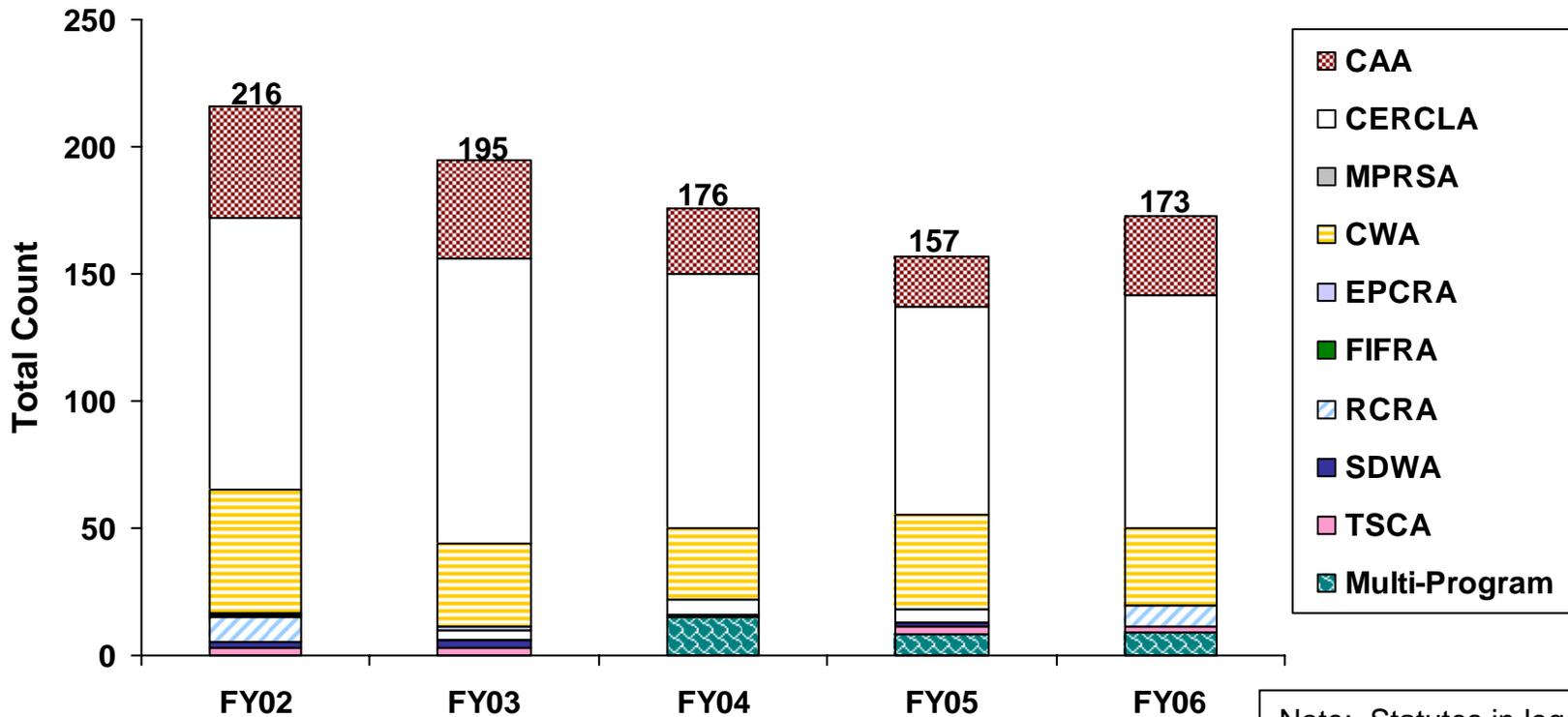
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## EPA Civil Judicial Enforcement Case Conclusions – Total and by Statute



Note: Statutes in legend are presented in same order as in stacked bars on left

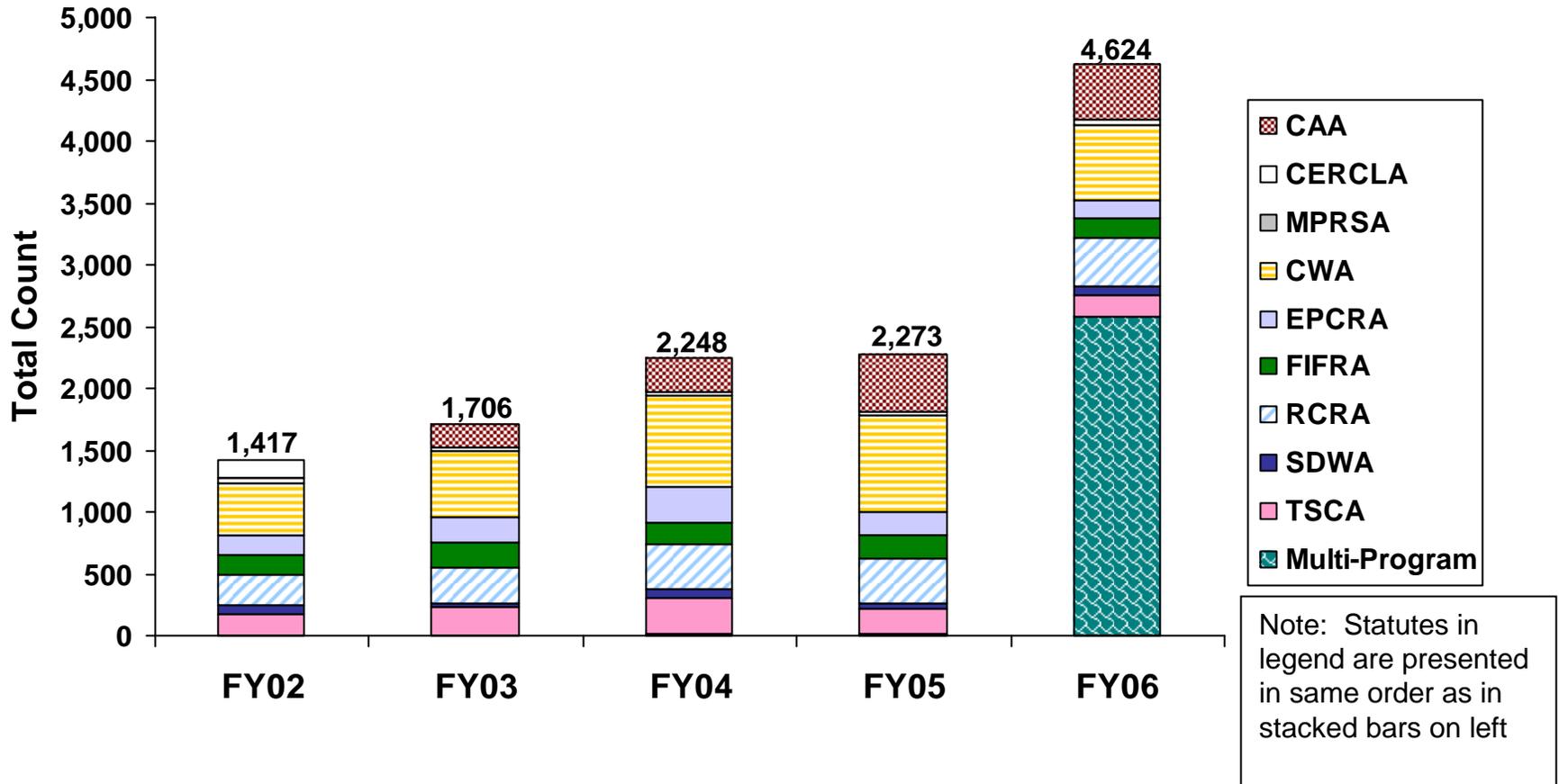
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## EPA Final Administrative Penalty Orders – Total and by Statute



FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

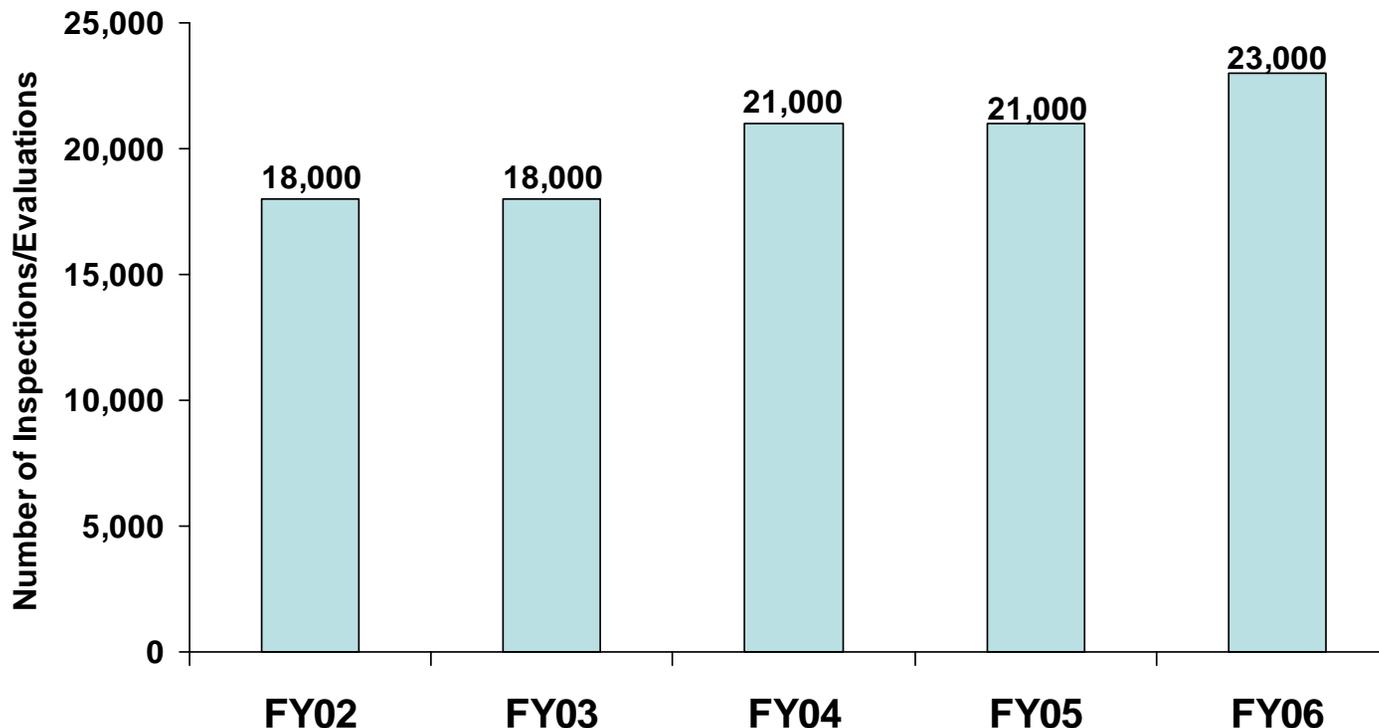
Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Compliance Monitoring

### Number of Inspections/Evaluations Conducted by EPA



FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
data source for all other fiscal years (2002-2005): annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.

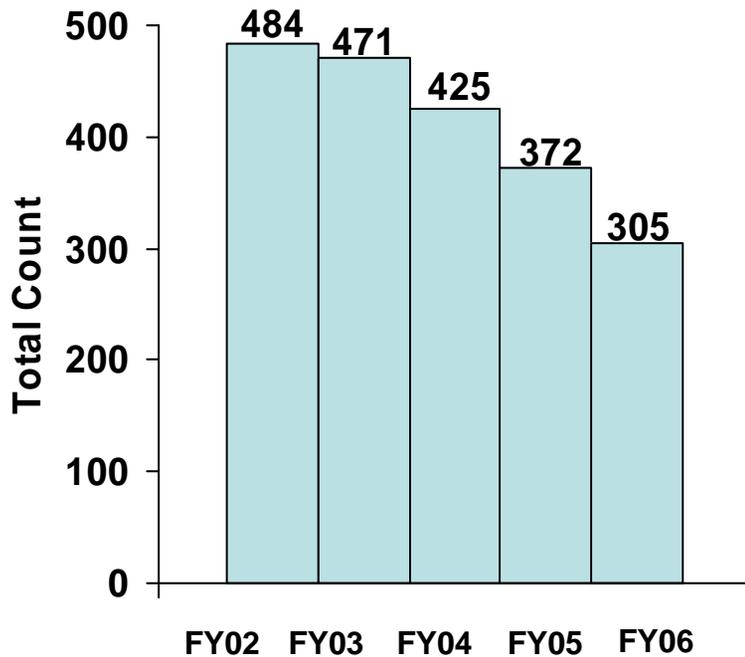


# FY2006 Compliance & Enforcement Annual Results

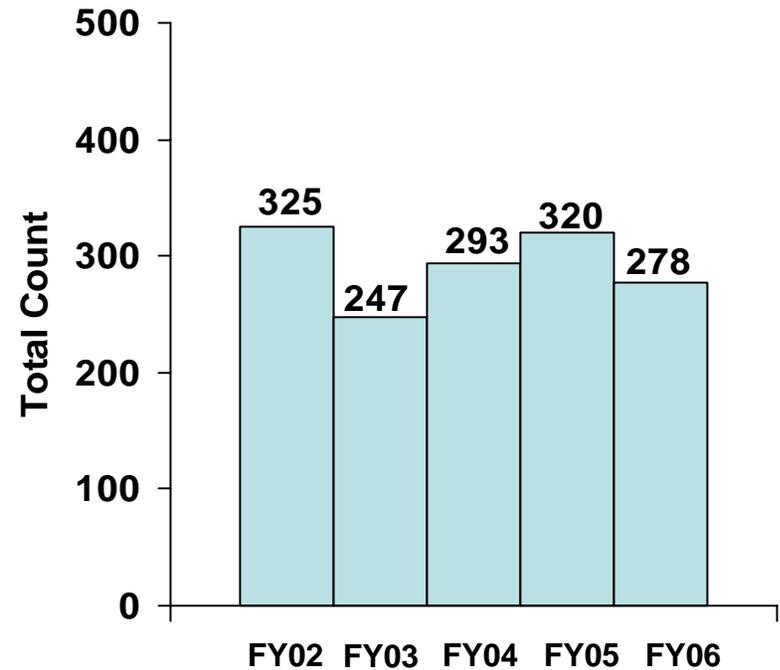
## Criminal Enforcement Program

### Environmental Crime

#### Environmental Crime Cases Initiated



#### Defendants Charged



FY2006 Data Source: Criminal Case Reporting System, October 28, 2006;

Source for previous years: annual Criminal Case Reporting System data

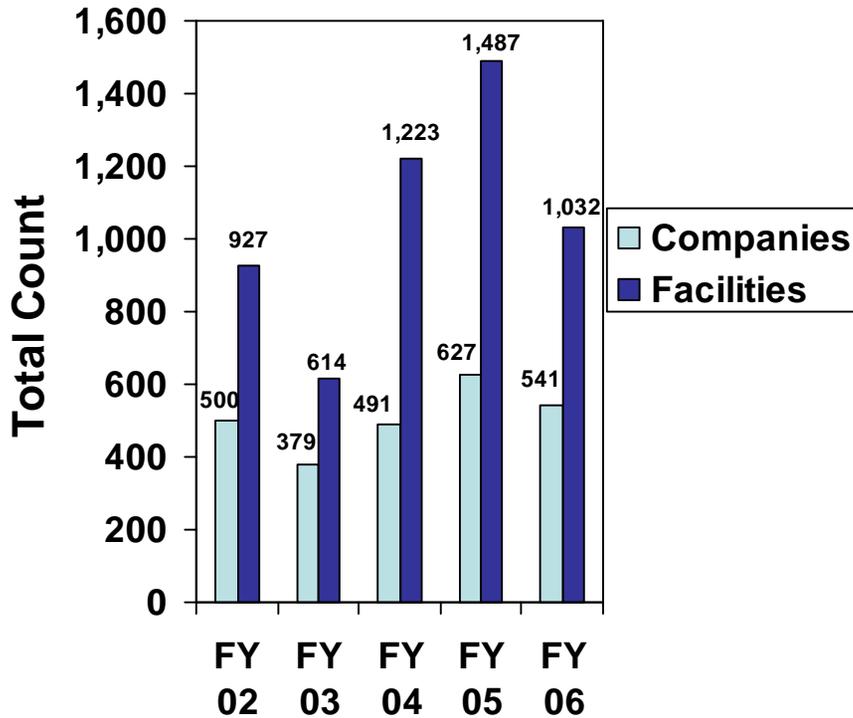
Disclaimer: Minor corrections may have been made to previous years' data.



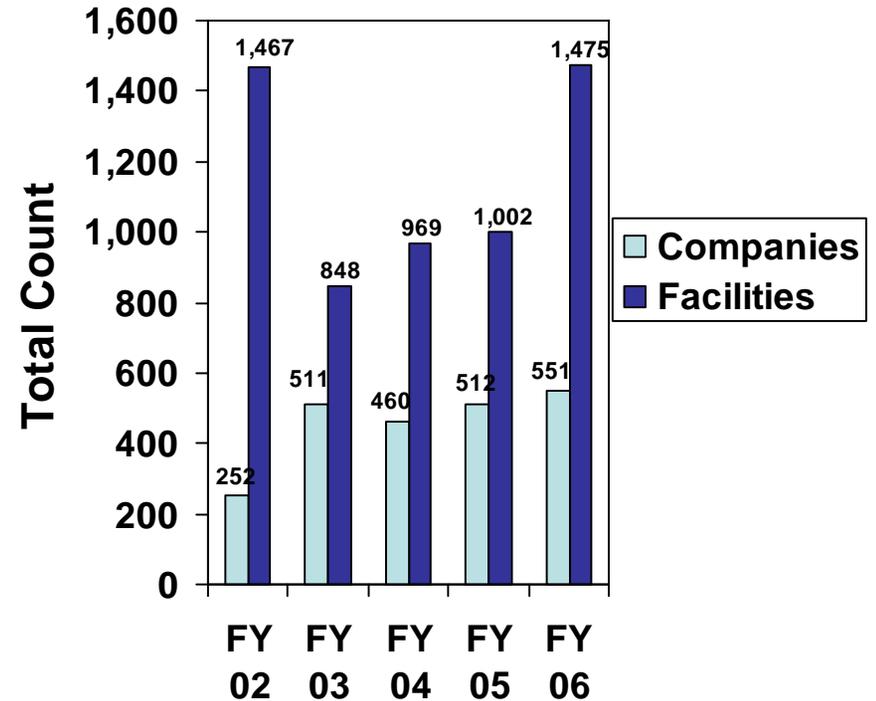
# FY 2006 Compliance & Enforcement Annual Results

## EPA Voluntary Disclosure Programs

**Voluntary Disclosures Initiated**



**Voluntary Disclosures Resolved**



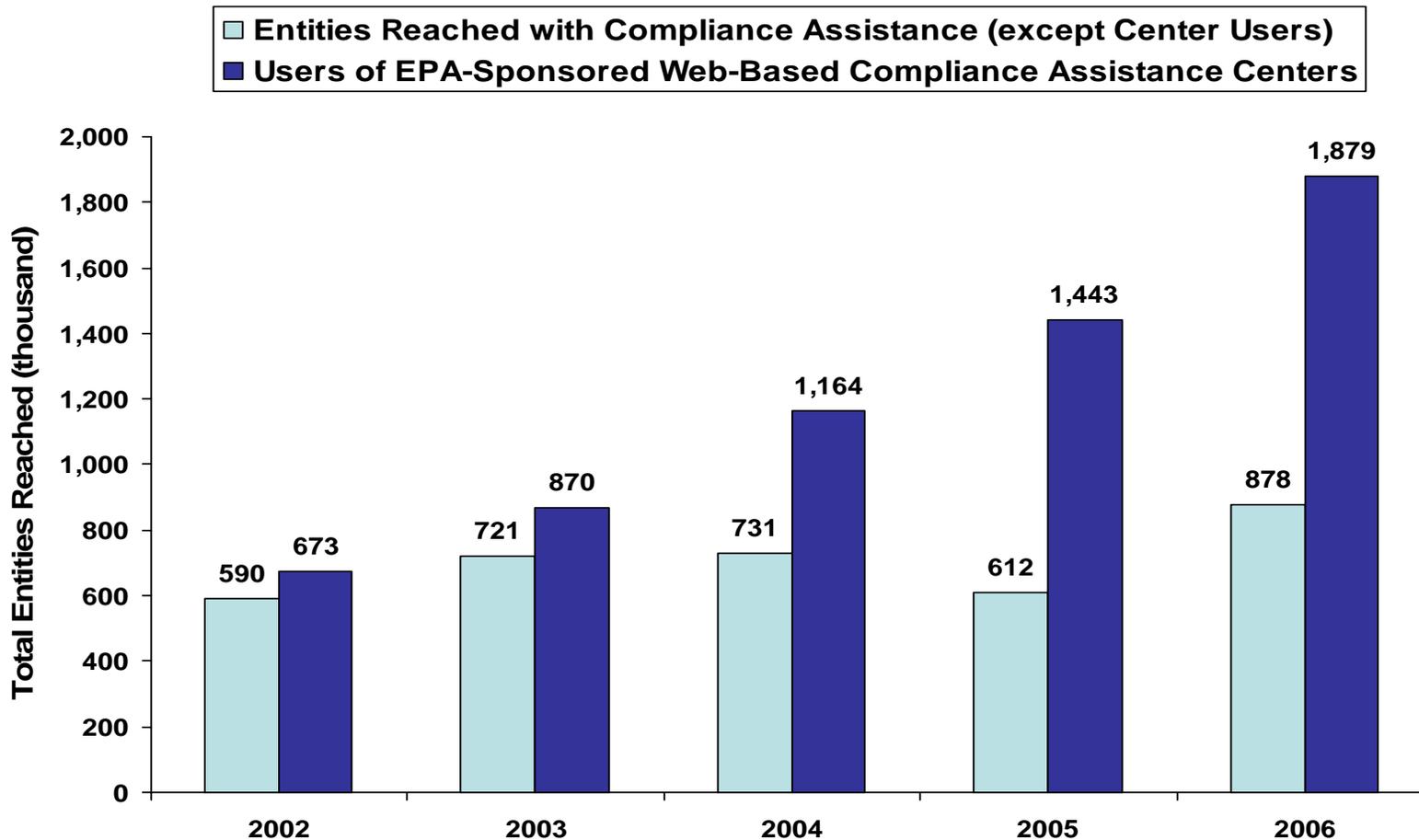
Data Source: Integrated Compliance Information System (ICIS), October 28, 2006; data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Entities Reached with EPA Compliance Assistance



FY2006 Data Sources: Integrated Compliance Information System (ICIS), October 28, 2006 and on-line usage report; data source for previous fiscal years: annual ICIS data and on-line usage reports

Disclaimer: Minor corrections may have been made to previous years' data.



FY2006 Annual Results can be found at:

<http://www.epa.gov/compliance/data/results/annual/fy2006.html>

U.S. Environmental Protection Agency



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<a href="#">For Citizens</a>	<a href="#">Assistance Centers</a>	<a href="#">Grants</a>	<a href="#">Refineries</a>
<a href="#">For Government</a>	<a href="#">Auditing</a>	<a href="#">Industry Sectors</a>	<a href="#">Sector Notebooks</a>
<a href="#">A-Z Index</a>	<a href="#">Community Internship</a>	<a href="#">Inspections</a>	<a href="#">Small Business</a>
	<a href="#">Environmental Projects</a>	<a href="#">National Priorities</a>	<a href="#">Wood Heater Program</a>

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- [4 Arizona companies disclose environmental violations](#) (11/13/2006)
- [6 California companies disclose environmental violations](#) (11/13/2006)
- [EPA settles for \\$915,000 with Pala Tribe over San Diego County water violations](#) (11/6/2006)

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National Environmental Policy Act

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## Compliance and Enforcement Annual Results: FY2006 Regional Results

Each year EPA reports on enforcement actions and how we help people meet environmental requirements. EPA organizes its programs into ten (10) regional offices to administer its programs. This year, in addition to national results, we are reporting by regional office.

The map below is divided into regions. For ease of reference the states in each region are also listed below. Click on the state where you live to obtain information about enforcement and compliance annual results in your state's region.

### Regional Offices

**Region 1** - (ME, NH, VT, MA, RI, CT)

**Region 2** - (NY, NJ, PR, VI)

**Region 3** - (PA, DE, DC, MD, VA, WV)

**Region 4** - (KY, TN, NC, SC, MS, AL, GA, FL)

**Region 5** - (MN, WI, IL, MI, IN, OH)

**Region 6** - (NM, TX, OK, AR, LA)

**Region 7** - (NE, KS, IA, MO)

**Region 8** - (MT, ND, WY, SD, UT, CO)

**Region 9** - (CA, NV, AZ, HI)

**Region 10** - (WA, OR, ID, AK)

### Locations

Choose Your State or Region.



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<a href="#">Cross-Media Highlights</a>
<a href="#">Compliance Highlights</a>
<a href="#">Assistance</a>
<a href="#">Incentives</a>
<a href="#">Results by Region</a>

FY2006 Annual Results can be found at:  
<http://www.epa.gov/compliance/data/results/annual/fy2006.html>



# **EPA FY2006 Compliance & Enforcement Annual Results**



**Prepared by the Office of Enforcement and Compliance Assurance**

**November 15, 2006**



# FY2006 Compliance & Enforcement Annual Results

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# FY2006 Compliance & Enforcement Annual Results

## FY2006 Highlights

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- Approximately 74% of pollution reductions and 71% of pollution control investments focus on priority air and water pollution problems.
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## FY2006 Compliance & Enforcement Annual Results Important Environmental Problems

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# FY2006 Compliance & Enforcement Annual Results

## Priority Water Pollution Problems

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Stormwater	195 million lbs.	\$150 million
Stormwater runoff from large urban areas transports contaminants directly over land and into waterways		
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# FY2006 Compliance & Enforcement Annual Results

## Priority Air Pollution Problems

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<b>Total</b>	<b>427.4 million lbs.</b>	<b>\$2,384 million</b>



# FY2006 Compliance & Enforcement Annual Results

## Air Enforcement Cases Yield Environmental and Human Health Benefits

### Pollutant Reductions

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  - a few thousand fewer cases of upper aggravated asthma; and
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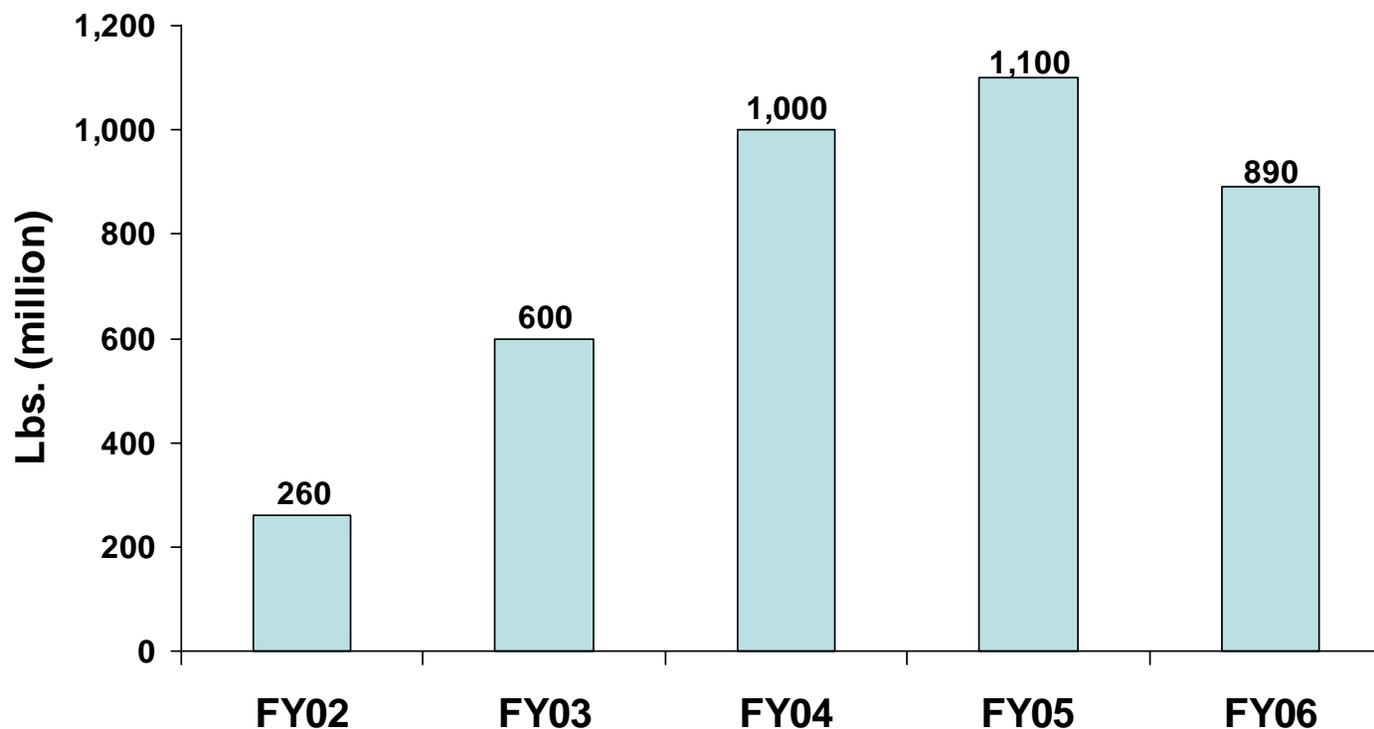


# FY2006 Compliance & Enforcement Annual Results

## Estimated Pollutant Reduction Commitments

### Obtained through Concluded EPA Enforcement Actions

#### Fourth Highest Year since 1998



FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for all other fiscal years (2002-2005): annual ICIS data

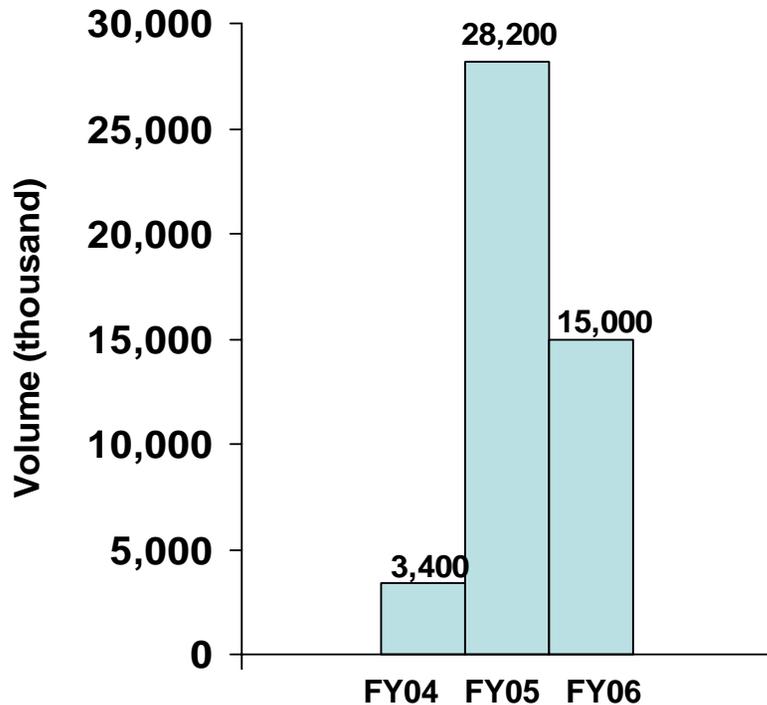
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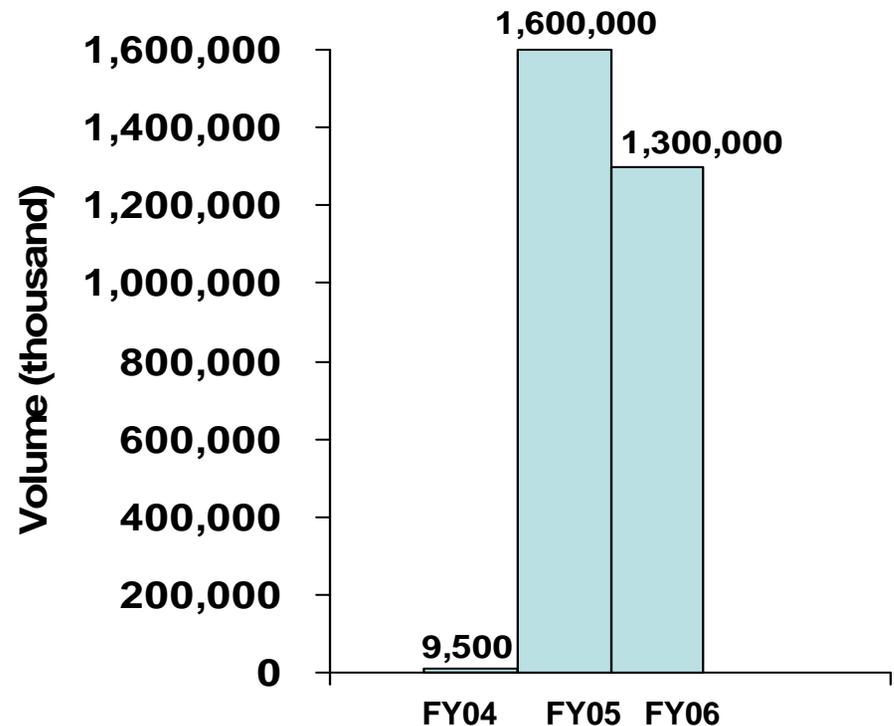
# FY2006 Compliance & Enforcement Annual Results

## Estimated Volume of Contaminated Soil and Water Addressed

**Contaminated Soil Cleaned  
(Cu. Yds.)**



**Contaminated Water Cleaned  
(Cu. Yds.)**



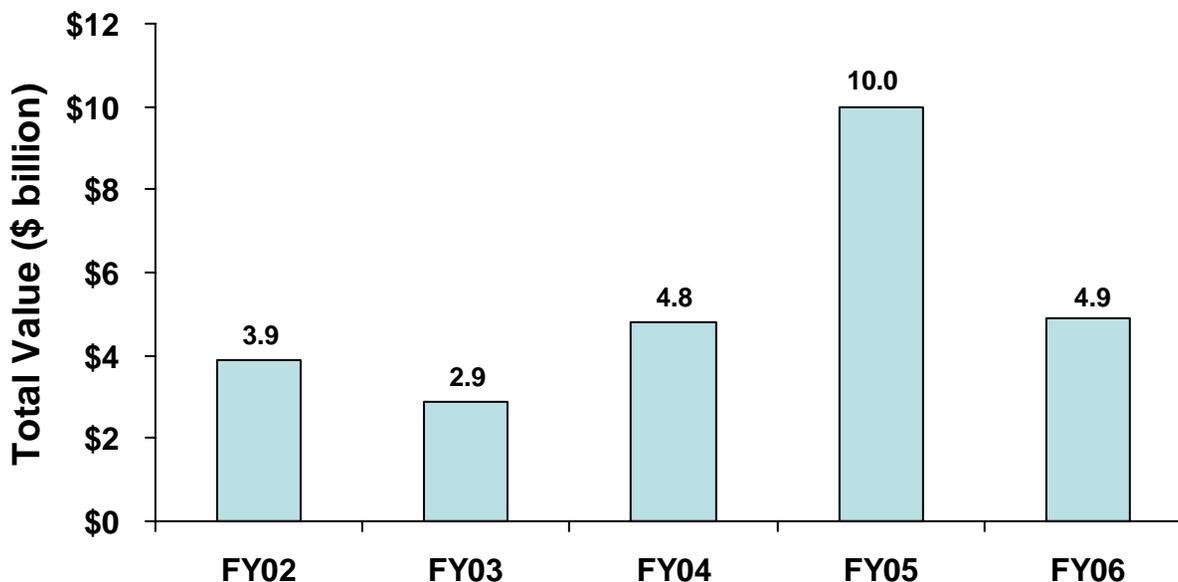
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
data source for previous fiscal years: annual ICIS data



# FY2006 Compliance & Enforcement Annual Results

## Dollar Values of Concluded EPA Civil Enforcement Actions Second Highest Year

Investments in Pollution Control  
(\$ billion)



Note: In previous years, this information was referred to as value of injunctive relief.

FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.

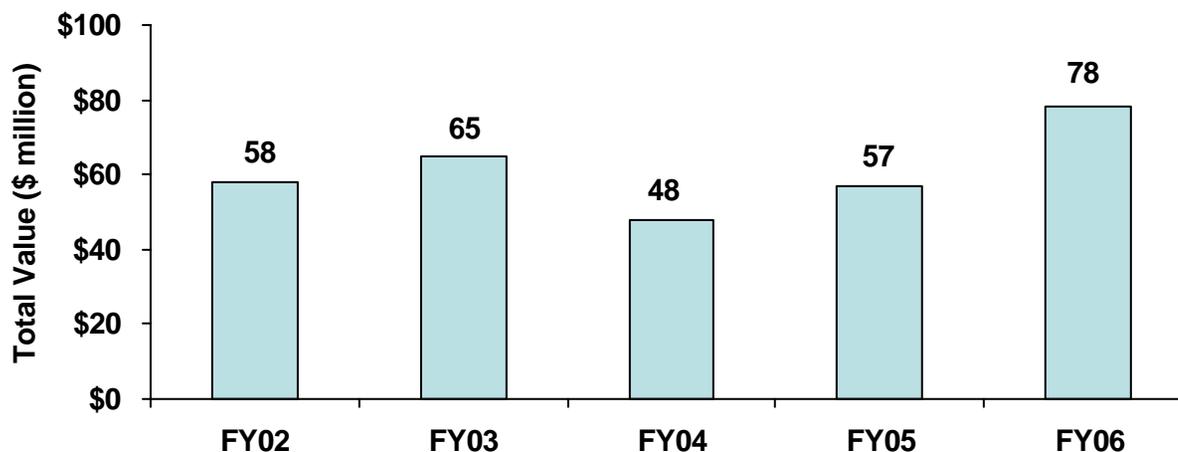


# FY2006 Compliance & Enforcement Annual Results

## Dollar Values of Concluded EPA Civil Enforcement Actions

### Five Year High

Environmentally Beneficial Projects  
(\$ million)



Note: In previous years, this information was referred to as value of SEPs.

FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
data source for previous fiscal years: annual ICIS data

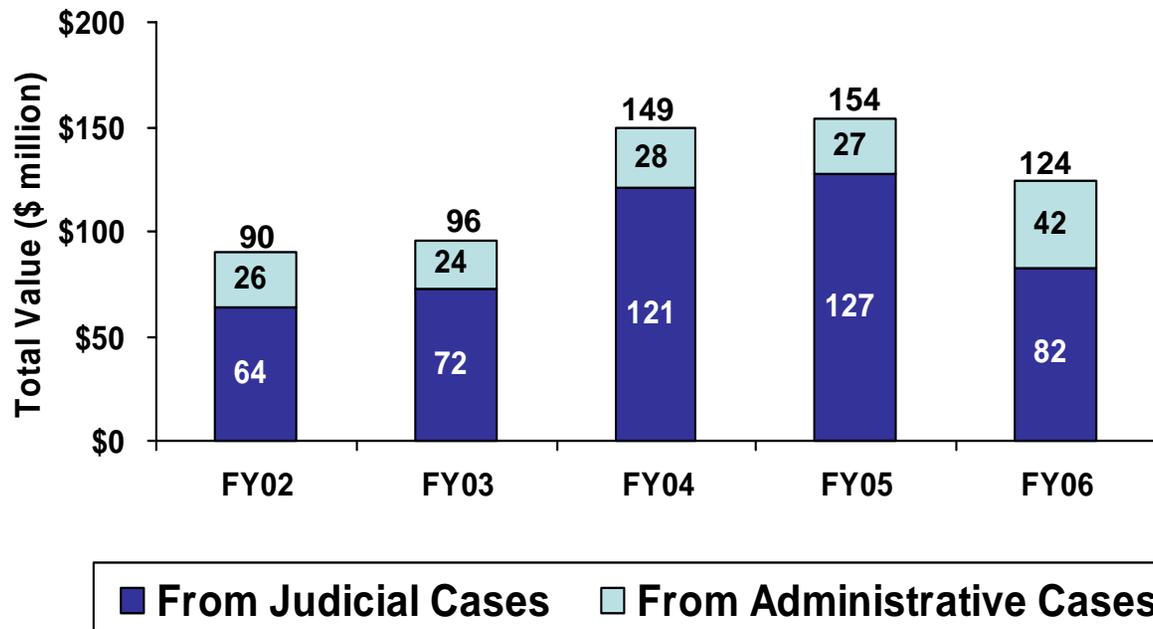
Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Dollar Values of Concluded EPA Enforcement Actions

Value of Civil Penalties  
(\$ million)



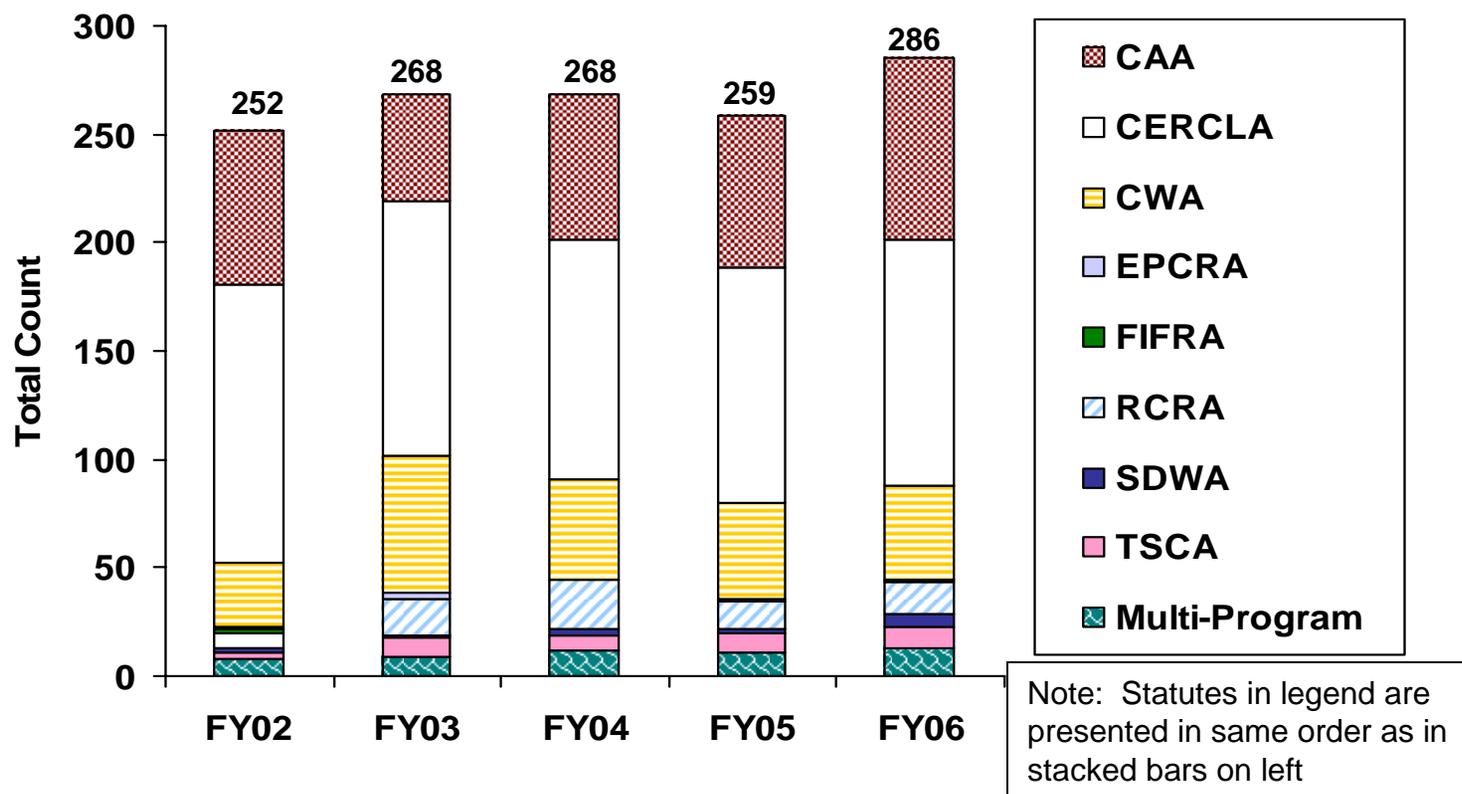
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY 2006 Compliance & Enforcement Annual Results

## EPA Referrals of Civil Judicial Enforcement Cases to Department of Justice – Total and by Statute



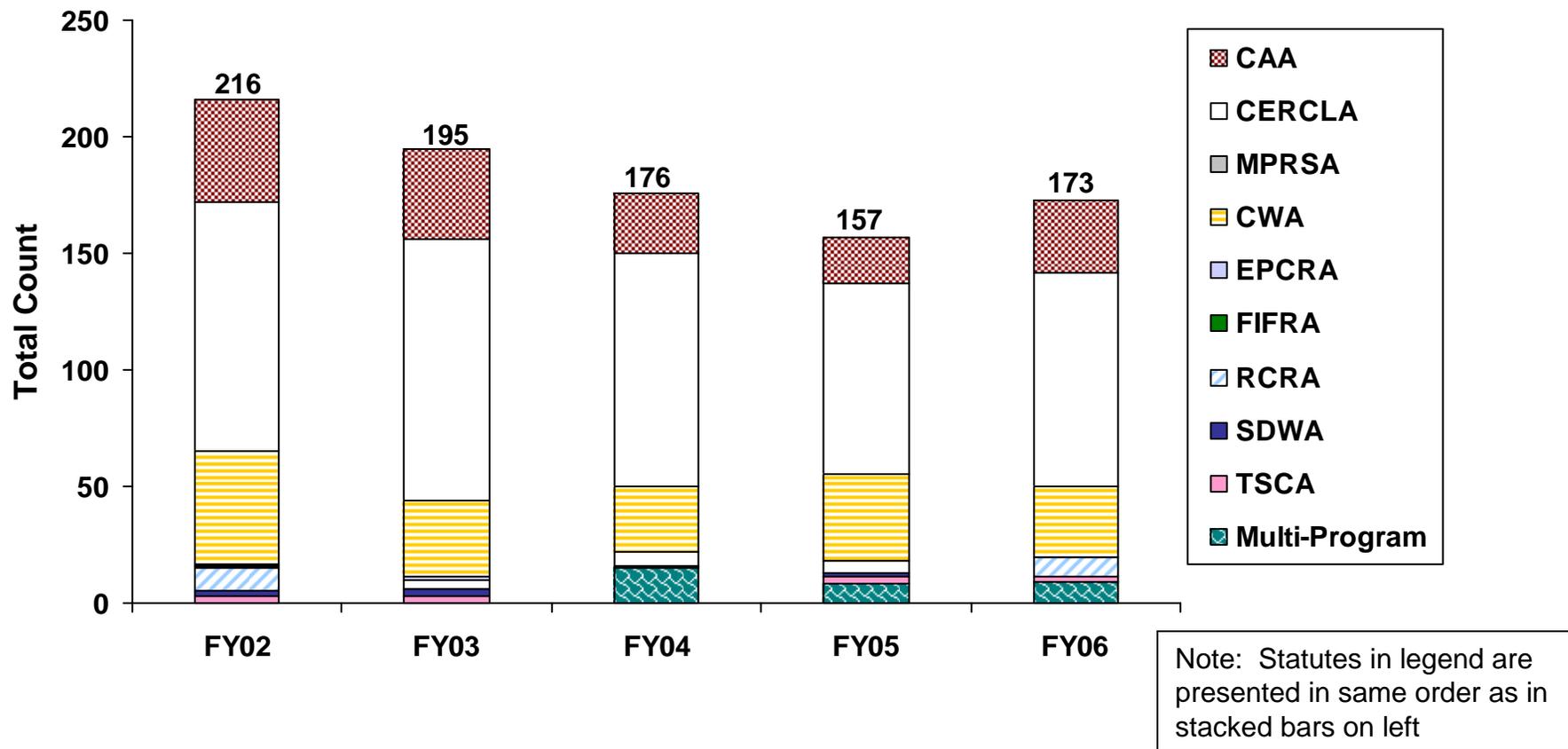
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## EPA Civil Judicial Enforcement Case Conclusions – Total and by Statute



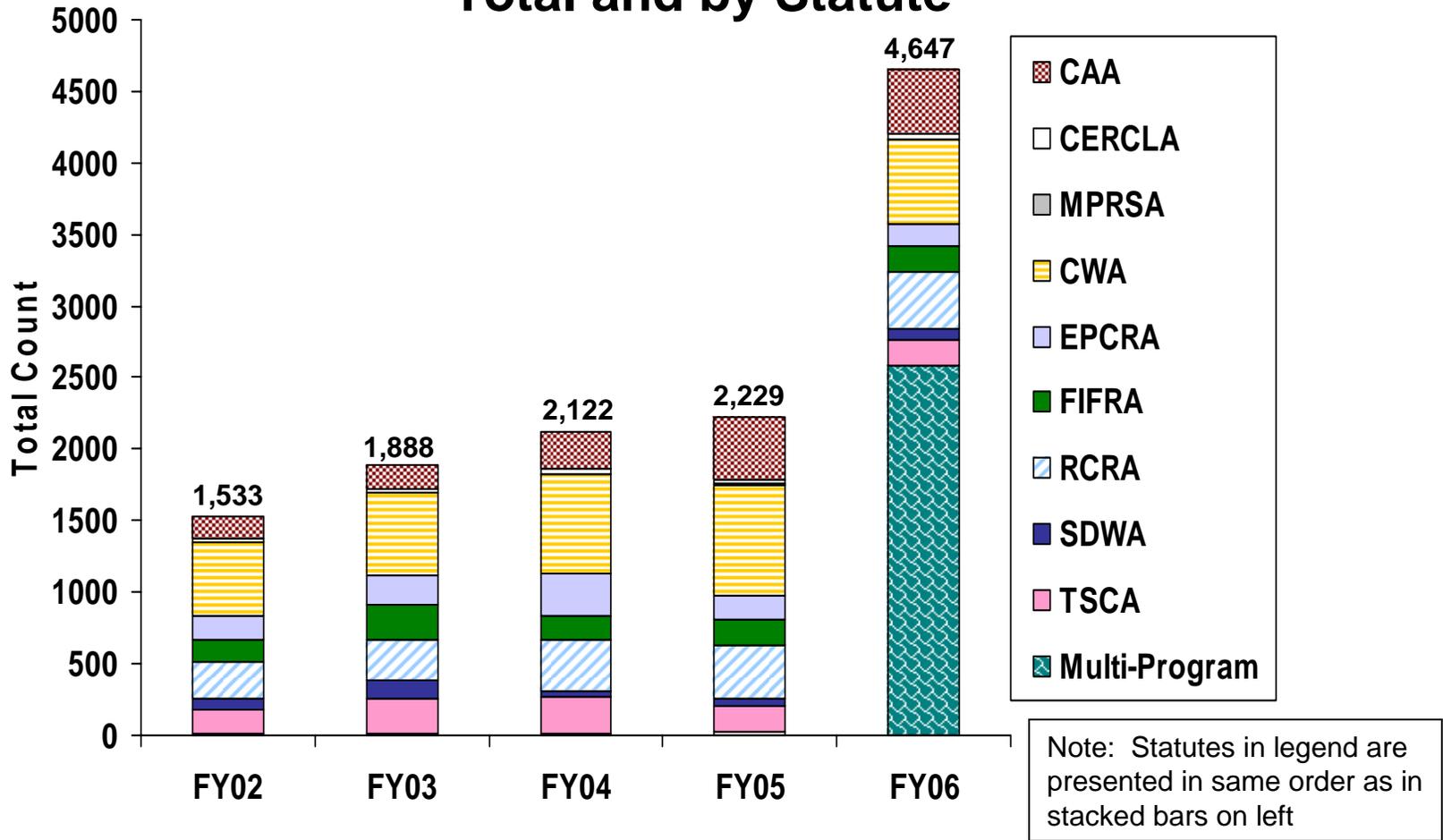
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY 2006 Compliance & Enforcement Annual Results

## EPA Administrative Penalty Order Complaints – Total and by Statute



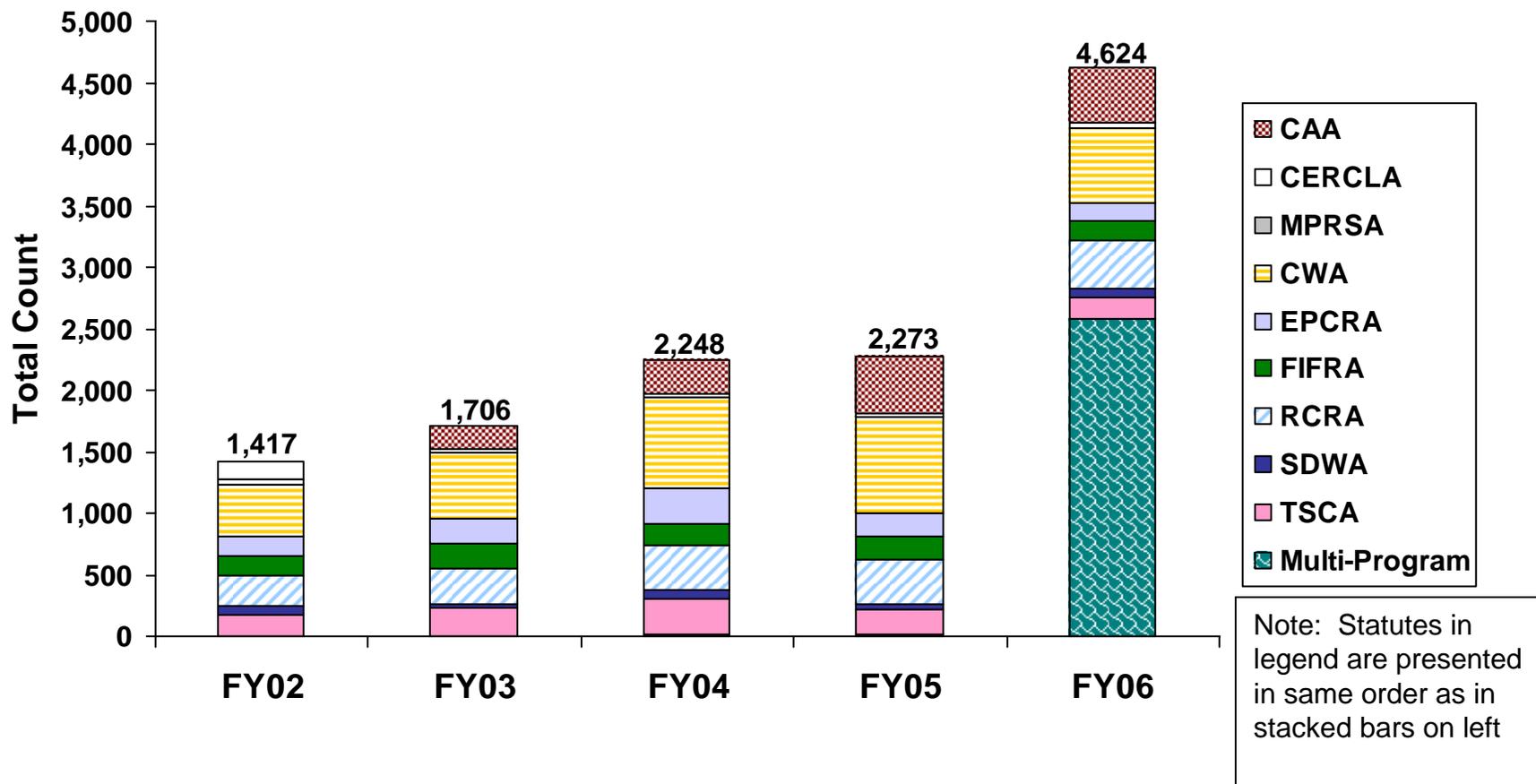
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## EPA Final Administrative Penalty Orders – Total and by Statute



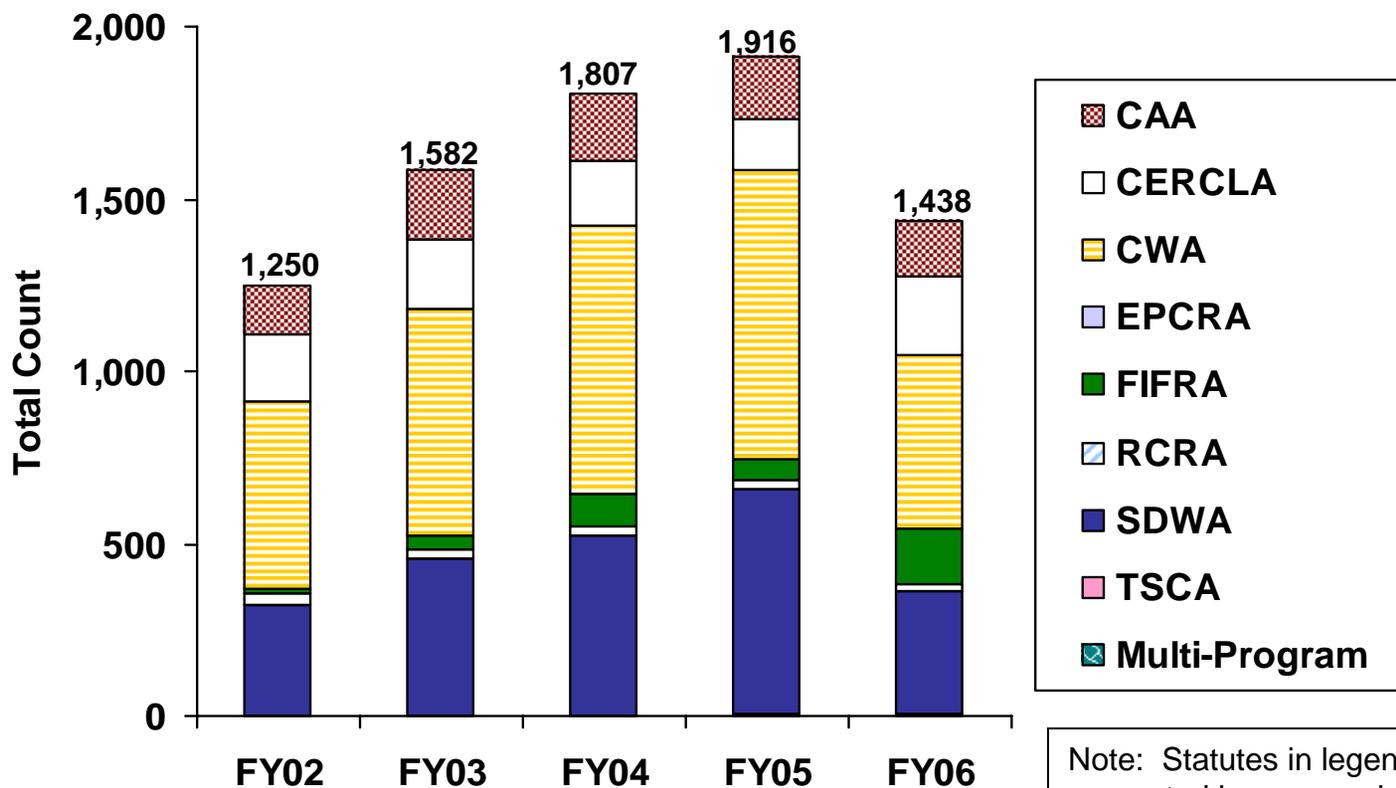
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## EPA Administrative Compliance Orders – Total and by Statute



Note: Statutes in legend are presented in same order as in stacked bars on left

FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for previous fiscal years: annual ICIS data

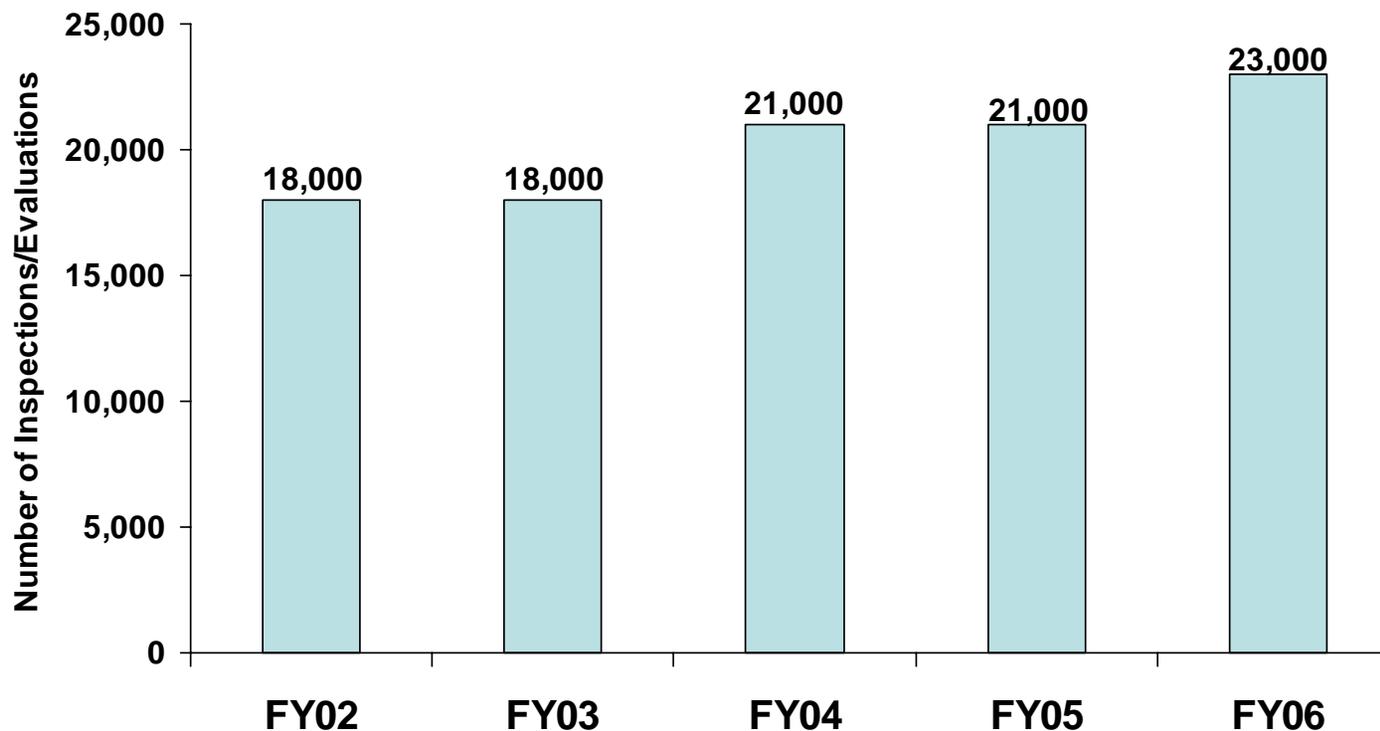
Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Compliance Monitoring

### Number of Inspections/Evaluations Conducted by EPA



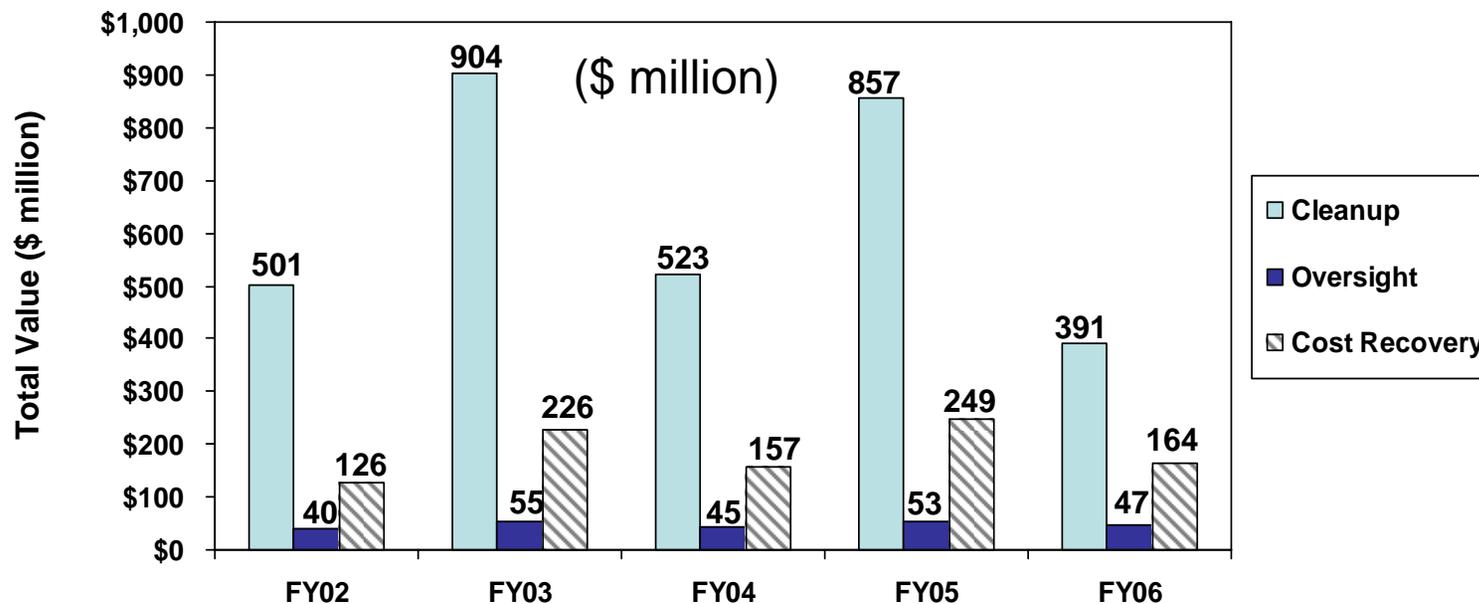
FY2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006;  
 data source for all other fiscal years (2002-2005): annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Potentially Responsible Party Commitments for Superfund Site Cleanup, Oversight and Cost Recovery



- In FY2006, the Office of Site Remediation Enforcement (OSRE) changed the reporting requirements for Consent Decrees (CDs) to count only CDs that have been entered by the courts. In previous years, OSRE gave credit when the CD was referred to the Department of Justice, lodged with the court, or entered by the court.

FY2006 Data Source for Clean-up and Cost Recovery: Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS), October 28, 2006; FY2006 Data Source for Oversight: Integrated Financial Management System (IFMS), October 28, 2006; Data source for previous fiscal years: annual CERCLIS and IFMS data

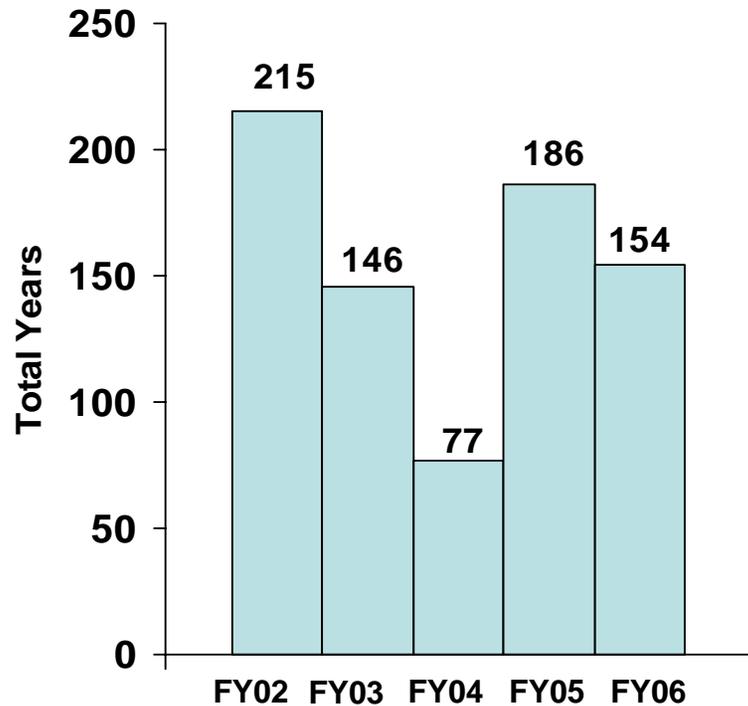


# FY2006 Compliance & Enforcement Annual Results

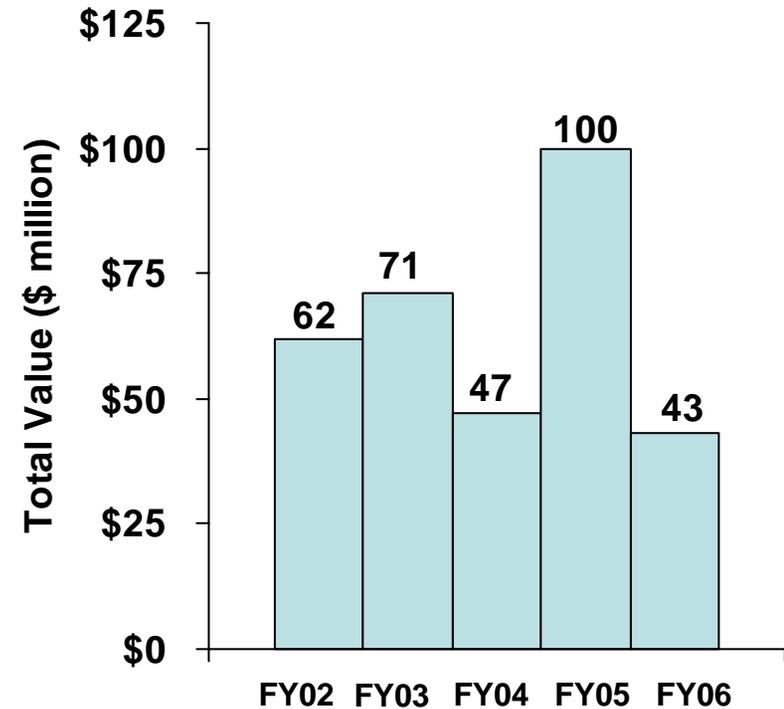
## Criminal Enforcement Program

### Sentencing Results

Years of Incarceration



Value of Fines and Restitution (\$ million)



FY2006 Data Source: Criminal Case Reporting System, October 28, 2006;  
 Source for previous years: annual Criminal Case Reporting System data

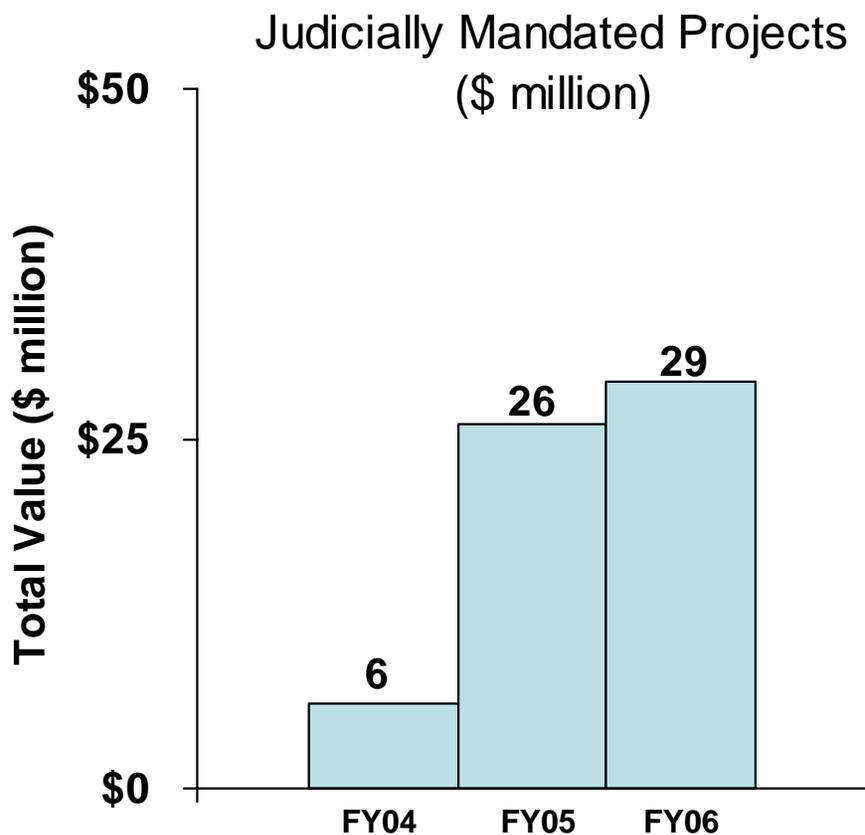
Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Criminal Enforcement Program

### Sentencing Results (continued)



FY2006 Data Source: Criminal Case Reporting System, October 28, 2006

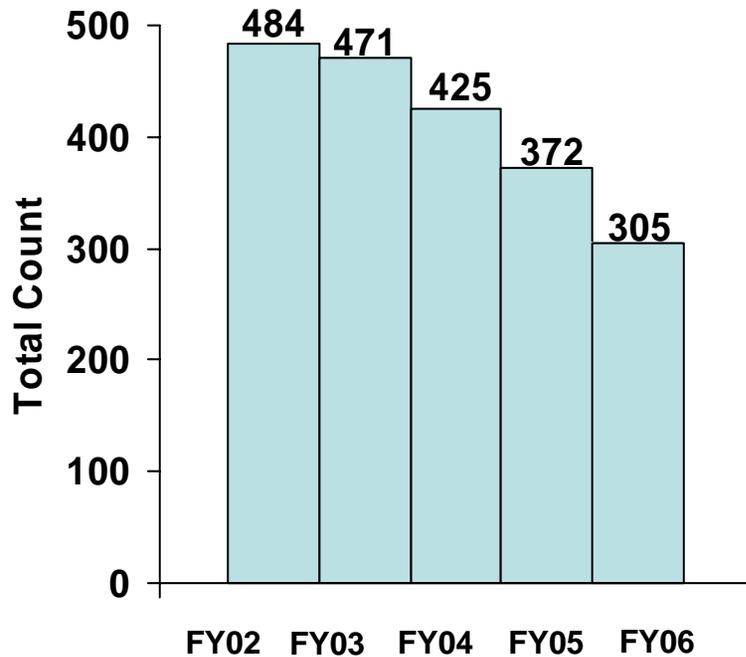


# FY2006 Compliance & Enforcement Annual Results

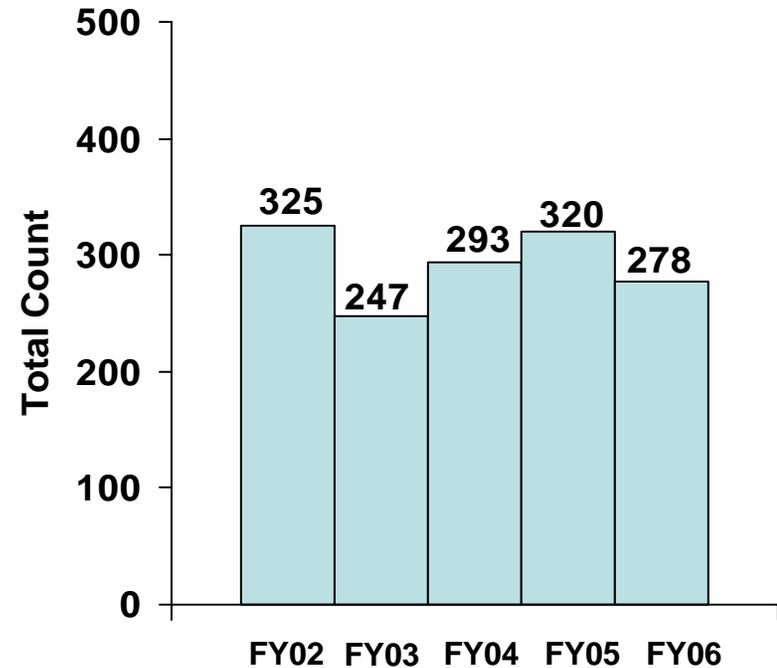
## Criminal Enforcement Program

### Environmental Crime

**Environmental Crime Cases Initiated**



**Defendants Charged**



FY2006 Data Source: Criminal Case Reporting System, October 28, 2006;  
 Source for previous years: annual Criminal Case Reporting System data

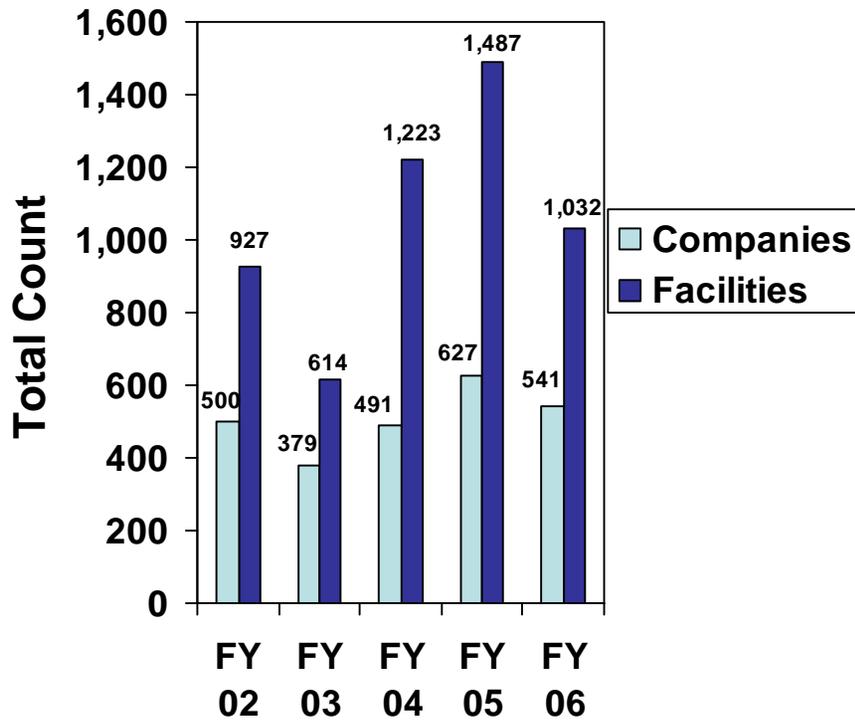
Disclaimer: Minor corrections may have been made to previous years' data.



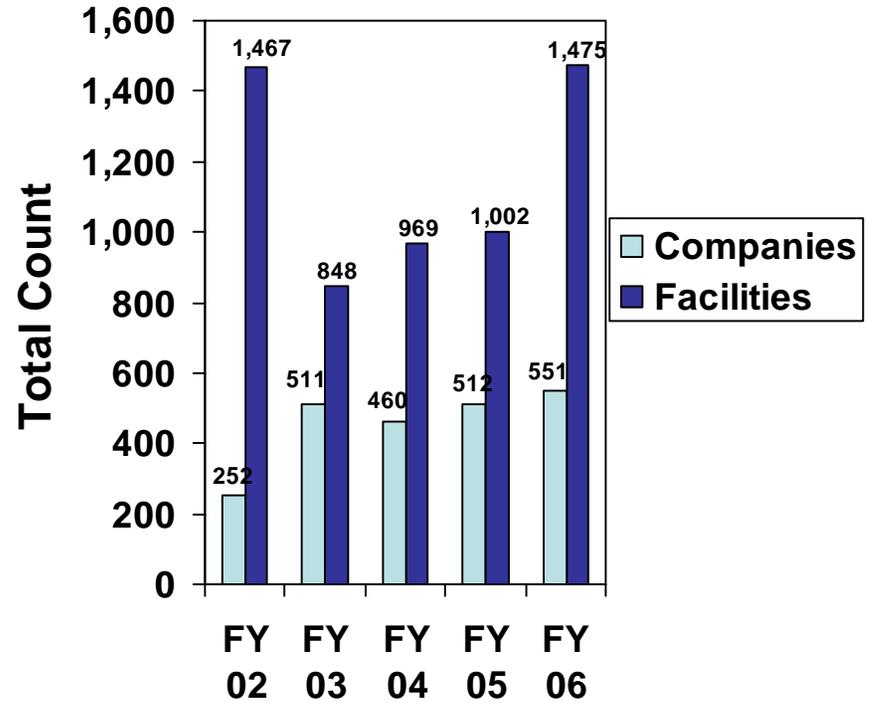
# FY 2006 Compliance & Enforcement Annual Results

## EPA Voluntary Disclosure Programs

Voluntary Disclosures Initiated



Voluntary Disclosures Resolved



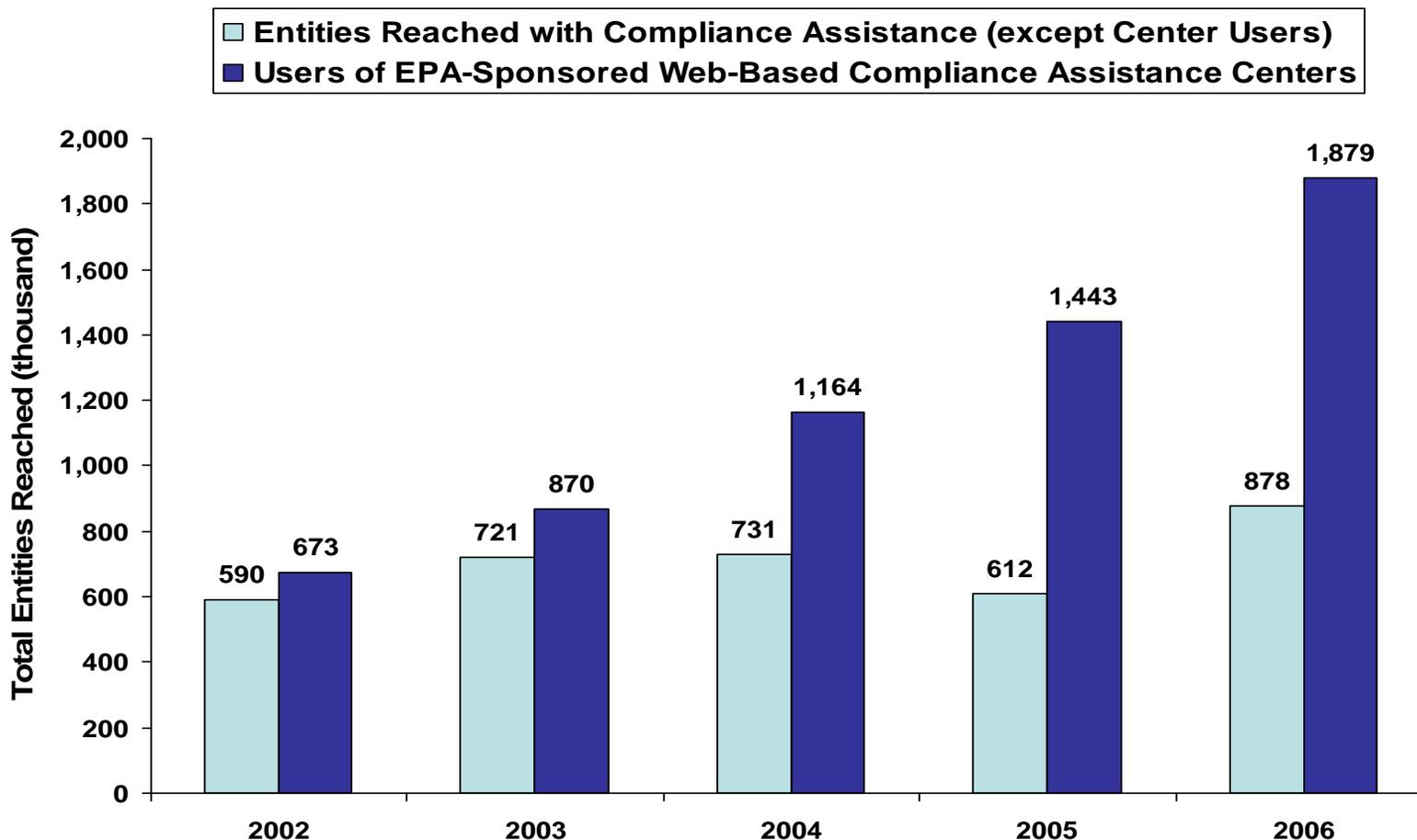
Data Source: Integrated Compliance Information System (ICIS), October 28, 2006; data source for previous fiscal years: annual ICIS data

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Entities Reached with EPA Compliance Assistance



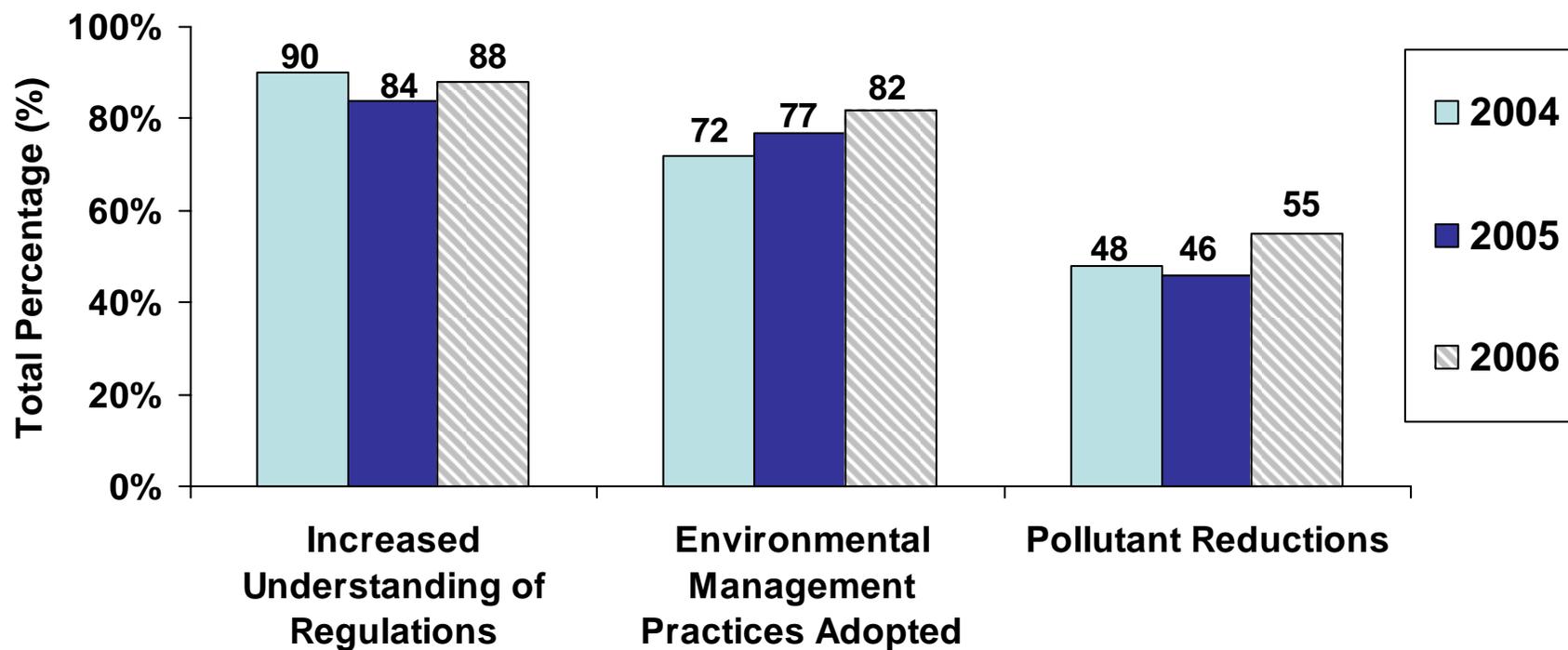
FY2006 Data Sources: Integrated Compliance Information System (ICIS), October 28, 2006 and on-line usage report; data source for previous fiscal years: annual ICIS data and on-line usage reports

Disclaimer: Minor corrections may have been made to previous years' data.



# FY2006 Compliance & Enforcement Annual Results

## Outcomes from EPA's 14 Web-Based Compliance Assistance Centers



FY2006 Data Source: On-line surveys completed during FY2006; data source for fiscal years 2004 and 2005: on-line surveys completed during 2004 and 2005 respectively

Disclaimer: Minor corrections may have been made to previous years' data.



## FY2006 Compliance & Enforcement Annual Results Acronyms - Statute/Section Description

CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (aka "Superfund")
CWA	Clean Water Act
EPCRA	Emergency Planning & Community Right-to-Know Act
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
MPRSA	Marine Protection, Research, and Sanctuaries Act
RCRA	Resource Conservation & Recovery Act
SDWA	Safe Drinking Water Act
TSCA	Toxic Substances Control Act
Title 18	U.S. Criminal Code - Crimes and Criminal Procedure



# FY2006 Compliance & Enforcement Annual Results

## Definitions

- **Complying Actions:** Direct, preventative or site management practice actions which owners of a violating facility take in response to an enforcement action. (Source: Guide to Calculating Environmental Benefits of Enforcement Cases: FY 2005 CCDS Update)
- **Concluded EPA Enforcement Actions:** Civil actions which require companies to come into compliance with applicable environmental laws and/or pay a civil penalty; includes Final Administrative Penalty Orders, Administrative Compliance Orders and Civil Judicial Consent Decrees. (Source: Guide to Calculating Environmental Benefits of Enforcement Cases: FY 2005 CCDS Update)
- **Cost Recovery:** A process by which the United States seeks to recover money previously expended in performing any response action from parties liable under CERCLA Section 107(a). Recoverable response costs include both direct and indirect costs. (Source: PRP Search Manual, Office of Site Remediation Enforcement, September 2003; available at: [www.epa.gov/compliance/cleanup/superfund/prpmanual.html](http://www.epa.gov/compliance/cleanup/superfund/prpmanual.html))



# FY2006 Compliance & Enforcement Annual Results

## Definitions continued

- **Direct Complying Actions:** Actions taken in response to an EPA enforcement action that treat, reduce, or eliminate a pollutant or emission/discharge stream to reduce/eliminate human health exposure or environmental impact (e.g., source reduction, cleaning up a spill, installing new pollution control equipment, remediating contaminated soil or water, etc.). The direct action will have a more immediate positive effect on the environment. (Source: Guide to Calculating Environmental Benefits of Enforcement Cases: FY 2005 CCDS Update)
- **Entities Reached with Compliance Assistance:** The total number of units receiving compliance assistance including: facilities, units of government ( e.g. local, tribal, or state) or individuals reached by EPA assistance. (Source: 2005 Guidance Addendum for Reporting Compliance Assistance in the Integrated Compliance Information System", March 2005)
- **EPA-Sponsored Web-based Compliance Assistance Centers:** EPA-sponsored Websites developed in partnership with industry, academic institutions, environmental groups and other agencies to serve as a "first stop" for sector-based environmental compliance information. (For additional information: [www.assistancecenters.net](http://www.assistancecenters.net))
- **Fines and Restitution:** Fines are the monetary amount assessed by a court of law against a defendant for violations of criminal law. Restitution is the monetary amount assessed , also by a court of law, to repay or compensate for loss, damage or injury. (Source: Criminal Case Reporting System (CCRS) manual.)



# FY2006 Compliance & Enforcement Annual Results

## Definitions continued

- Fiscal Year (FY): The fiscal year for the federal government begins on October 1 and ends September 30 of the following year.
- Injunctive Relief: Represents the actions a regulated entity is ordered by a court to undertake to achieve and maintain compliance (e.g., installing a new pollution control device to reduce air pollution, or preventing emissions of a pollutant from occurring in the first place.) (Source: ECHO Data Dictionary – Total Complying Action Cost)
- “Integrated Compliance Information System” (ICIS) is a web-based data system which integrates federal [civil] enforcement and compliance data. With the exception of some inspection data and CERCLA data, it is the database of record for all federal [civil] enforcement and compliance data. (Source: ICIS User Guide, August 2002)
- Judicially Mandated Projects: Judicially Mandated Projects represent the monetary value of environmentally beneficial projects or other activities that a judge orders defendants to pay for or conduct themselves. Although part of a defendant’s formal sentence, they are distinct from, and in addition to, fines and restitution. (Source: Criminal Case Reporting System (CCRS) manual.)
- Multi-Program Cases: Civil enforcement cases that address separate environmental problems under different programs. This could include violations of different programs within one media or statute. (Source: EPA Office of Enforcement and Compliance Assurance Guidance: “Revised Approach for Counting EPA Enforcement Case Initiations and Conclusions”, September 2003)



# FY2006 Compliance & Enforcement Annual Results

## Definitions continued

- NOx: Nitrogen Oxide, or NOx is the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. The primary manmade sources of NOx are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels. They can cause a variety of environmental and health impacts. (Source: <http://www.epa.gov/air/urbanair/nox/what.html>)
- Oversight (under Superfund): The dollar value of all costs billed to the Potentially Responsible Parties (PRPs) by EPA for overseeing cleanup work that is performed and paid for by PRPs at specific Superfund sites. (Source: PRP Search Manual, Office of Site Remediation Enforcement, September 2003; available at: [www.epa.gov/compliance/cleanup/superfund/prpmanual.html](http://www.epa.gov/compliance/cleanup/superfund/prpmanual.html))
- Pollutant Reductions: A calculation is made to estimate the reduction of pollutants anticipated as a result of an enforcement action. Since the enforcement action is designed to return the facility to compliance and bring the pollutant level down to the permitted level, the calculation of the pollution reduction is based on a comparison of the current level of pollutant release (an amount above the allowable permit level) against the permit level. In the context of compliance assistance, pollution reduction is based on the percentage of survey respondents who affirmatively respond to the question asking if they reduced, treated, or eliminated pollution as a result of EPA or EPA-sponsored compliance assistance. (Source: Case Conclusions Data Sheet Training Booklet, USEPA Office of Enforcement and Compliance Assurance, August 2004; ICR 1860.03 for Assessment of Compliance Assistance Projects, 2005)



# FY2006 Compliance & Enforcement Annual Results

## Definitions Continued

- Potentially Responsible Party: Any individual or entity including owners, operators, transporters, or generators who may be liable under CERCLA Section 107(a). (Source: PRP Search Manual, Office of Site Remediation Enforcement, September 2003; available at: [www.epa.gov/compliance/cleanup/superfund/prpmanual.html](http://www.epa.gov/compliance/cleanup/superfund/prpmanual.html))
- Site Cleanup: Actions taken at a site to deal with a release or threatened release of a hazardous substance that could affect human health or the environment. The term “cleanup” is sometimes used interchangeably with the terms remedial action, removal action, response action, or corrective action. (Source: PRP Search Manual, Office of Site Remediation Enforcement, September 2003; available at: [www.epa.gov/compliance/cleanup/superfund/prpmanual.html](http://www.epa.gov/compliance/cleanup/superfund/prpmanual.html))
- SO<sub>x</sub>: Sulfur Oxide, or SO<sub>x</sub>, is the term for a family of gases that dissolve easily in water. Sulfur dioxide belongs to this family of gases which are primarily formed when fuel containing sulfur (mainly coal and oil) is burned. Fuel combustion, largely from coal-fired power plants, accounts for most of the total emissions. They can cause a variety of environmental and health impacts. (Source: <http://www.epa.gov/air/urbanair/so2/what1.html>)



# FY2006 Compliance & Enforcement Annual Results

## Definitions Continued

- Supplemental Environmental Projects (SEPs): Environmentally beneficial projects, which a defendant/respondent agrees to undertake as part of some civil enforcement case settlements, but which defendant/respondent is not legally required to perform. (Source: Final Supplemental Environmental Project Policy, April 10, 1998)
- Volume of Contaminated Medium Addressed: The volume of environmental medium (e.g., soil) that is subject to the Superfund response action or RCRA corrective action, such that, at the conclusion of the action, human health and the environment are protected. Contaminated soil - refers to the volume of soil subject to removal or treatment. Contaminated water - refers to the volume of physical aquifer (not water, but entire formation) that will be addressed by the response or corrective action. (Source: Measures and Calculations for Volume of Contaminated Medium Addressed, November 2003)
- Voluntary Disclosure Program (Voluntary Disclosures Initiated/Voluntary Disclosures Resolved): A voluntary disclosure initiated is a written disclosure, provided voluntarily to EPA by a regulated entity, that contains the identity and location of facilities and description of the violations being disclosed. A voluntary disclosure is resolved through an administrative action, judicial action, or Notice of Determination issued by EPA to address a voluntary disclosure received from a regulated entity. Penalties for violations identified to EPA through a voluntary disclosure may be mitigated pursuant to EPA's Audit Policy, Small Business Policy or a program-specific penalty policy. (Source: ICIS Data Guidance, Sept. 10, 2004, Region 5 Lead Workgroup)



**U.S. Environmental Protection Agency  
Compliance and Enforcement Annual Results  
Numbers at a Glance  
Fiscal Year 2006**

□ Estimated Environmental Benefits of Enforcement Actions (Including Supplemental Environmental Projects (SEPs)) obtained or committed to:	
▪ Pollutants Reduced (Pounds)	890,000,000
▪ Contaminated Soil Cleaned (Cubic Yards)	15,000,000
▪ Contaminated Water Cleaned (Cubic Yards)	1,300,000,000
▪ Stream Miles (Linear Feet)	109,000
▪ Wetlands Protected (Acres)	5,600
▪ People Protected by Safe Drinking Water Act (SDWA) Enforcement	7,600,000
□ Value of Complying Actions	\$4,900,000,000
□ Value of Supplemental Environmental Projects (SEPs)	\$78,000,000
□ Cases with SEPs	220
□ Voluntary Disclosure Program	
▪ Pollutants Reduced as a Result of Audits or Other Actions (Pounds)	50,000
▪ Facilities Initiated	1,032
▪ Companies Initiated	541
▪ Notices of Determination (NODs)	485
▪ Facilities Resolved	1,475
▪ Companies Resolved	551
□ Total Entities Reached by Compliance Assistance	878,000
□ Number of User Visits to Web-Based Compliance Assistance Centers	1,879,000
□ EPA Administrative Compliance Orders (ACOs)	1,438
□ EPA Administrative Penalty Complaints (APCs)	4,647
□ EPA Civil Judicial Referrals	286
□ EPA Final Administrative Penalty Order (FAPO) Settlements	4,624
□ EPA Civil Judicial Conclusions	173
□ EPA Administrative Penalties	\$42,000,000
□ EPA Judicial Penalties	\$82,000,000

❑ EPA Stipulated Penalties	\$10,000,000
❑ Inspections/Evaluations	23,000
❑ Civil Investigations	352
❑ Number of Regulated Entities Taking Complying Actions during EPA Inspections/Evaluations	1,234
❑ Number of Regulated Entities Receiving Assistance during EPA Inspections/Evaluations	11,161
❑ Criminal Program	
▪ Environmental Crime Cases Initiated	305
▪ Defendants Charged	278
▪ Sentences (Years)	154
▪ Fines and Restitution	\$43,000,000
▪ Judicially Mandated Projects	\$29,000,000
▪ Pollutant Reductions (Pounds)	17,000,000
❑ Superfund Cleanup Enforcement	
▪ RA starts where Settlement Reached or Enforcement Action Taken by the time of the RA Start (during the FY) at Non-Federal Superfund Sites that have Known Viable, Liable Parties (%)	100%
▪ Private Party Commitments for Future Response Work (Incl cashouts) <sup>1</sup>	\$391,000,000
▪ Private Party Commitments for Cost Recovery <sup>1</sup>	\$164,000,000
▪ Cost Recovery Statute of Limitation Cases Addressed with Total Past Costs Greater than or Equal to \$200,000 (%)	100%

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<sup>1</sup>In FY 2006, the Office of Site Remediation Enforcement (OSRE) changed the reporting requirements for Consent Decrees (CD) to count only CDs that have been entered by the courts. In previous years, OSRE gave credit at the referred, lodged or entered stages. The amounts for FY2006 include CDs that were counted in previous years (at the referral or lodged stages).

Sources for Data displayed in this document: Integrated Compliance Information System (ICIS), Criminal Case Reporting System, Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS), Resource Conservation and Recovery Act Information (RCRAInfo), Air Facility System (AFS), Permit Compliance System (PCS), and National Compliance Data Base System (NCDB), October 28, 2006.



## Compliance and Enforcement Annual Results: Enforcement Highlights

### FY2006 Air Case Highlights

Air pollution threatens human health and damages the environment. EPA continues to enforce our nation's environmental laws and to ensure compliance with the Clean Air Act nationwide, making our air cleaner. While often invisible, pollutants in the air create smog and acid rain and cause cancer or other serious health effects. The air pollutants addressed by these settlements can cause serious respiratory problems and exacerbate cases of childhood asthma. As a result of cases concluded in fiscal year 2006, 583 million pounds of pollution will be reduced, eliminated or properly managed.

### Coal-Fired Electric Utilities

Since 1999, EPA and the Department of Justice have filed a number of lawsuits against coal-fired electric utilities alleging that these companies made major modifications to their plants without installing equipment to control pollution that causes smog, acid rain and soot and that contributes to severe respiratory problems and childhood asthma in violation of the New Source Review provisions of the Clean Air Act.

EPA has litigated and resolved several of these lawsuits and negotiated settlements with 11 companies: Tampa Electric Company; PSEG Fossil; Southern Indiana Gas and Electric Company; Virginia Electric Power Company; Alcoa; Wisconsin Electric Power Company; Santee Cooper; Illinois Power and Dynegy Midwest Generation; Ohio Edison; Alabama Power Company James H. Miller, Jr. Plant; and Minnkota Power Cooperative and Square Butte Electric Cooperative. These settlements will result in the removal of approximately one million tons of pollution from the air annually and an expenditure of about \$5.8 billion to install state-of-the-art air pollution controls.

The major settlements concluded in 2006 are:

**Alabama Power Company James H. Miller, Jr. Plant** will spend more than \$200 million to install state-of-the art pollution control equipment to reduce air pollution by nearly 34,000 tons per year. The company will also pay a \$100,000 civil penalty.

**Minnkota Power Cooperative and Square Butte Electric Cooperative** will spend more than \$100 million to install state-of-the-art pollution control equipment to reduce harmful air emissions by more than 33,000 tons per year and will fund \$5 million in renewable energy development projects, including wind power projects in their service

area of North Dakota and Minnesota. The cooperatives will also pay an \$850,000 civil penalty.

## **Petroleum Refineries**

Petroleum Refineries have proved to be one of the largest, most comprehensive and successful enforcement and compliance national priorities ever undertaken by EPA. EPA's investigations of petroleum refineries focused on the four most significant Clean Air Act compliance challenges for the industry and the emissions units that are the source of most of their pollution: New Source Review/Prevention of Significant Deterioration - fluidized catalytic cracking units, heaters and boilers; New Source Performance Standards - flares, sulfur recovery units, fuel gas combustion devices (including heaters and boilers); Leak Detection and Repair requirements; and Benzene National Emissions Standards for Hazardous Air Pollutants. EPA selected refineries as a national priority because of the high rate of violations and rate of air emissions from petroleum refineries. EPA initiated over 150 issue-specific investigations at more than 100 refineries and, beginning in fiscal year 2000, embarked on a process of "global" settlements, which address each issue of concern at all of a company's refineries. The settlements under the this priority require state-of-the-art controls and the implementation of enhanced programs to ensure continuing compliance with applicable requirements.

Through the end of fiscal year 2006, EPA has entered into "global" settlements with seventeen refiners affecting 85 refineries in 25 states, representing more than 77 percent of domestic refining capacity, to reduce emissions of harmful air pollutants by approximately 315,000 tons per year at a combined cost of \$4.4 billion. They will also perform supplemental environmental projects costing approximately \$60 million. EPA is in ongoing negotiations with nine additional refiners affecting 15 refineries representing over 11 percent of domestic refining capacity.

The following are major settlements concluded this fiscal year 2006.

**ConocoPhillips** will reduce harmful air emissions by more than 47,000 tons per year at a cost of more than \$525 million and will spend more than \$10 million on environmental projects to reduce emissions further and to support activities in the communities where it operates. The company also will pay a \$4.5 million civil penalty.

**Exxon Mobil Corporation** will reduce emissions of air pollutants by more than 53,000 tons annually at a cost of more than \$570 million. Exxon will pay an \$8.7 million civil penalty and will spend more than \$9.7 million on environmental projects in communities around the company's refineries.

**Sunoco, Inc.** will reduce emissions of harmful air pollutants by more than 23,900 tons annually at a cost of approximately \$285 million and will spend more than \$3.9 million on further emission controls and environmentally beneficial projects. Sunoco will pay a \$3 million civil penalty.

**Valero Refining Company** will install emission control technologies at a cost of more than \$700 million to reduce air pollution by more than 20,500 tons annually and will spend more than \$5.5 million on further emission controls and environmentally beneficial projects. Valero will pay a \$5.5 million civil penalty.

## **Ethanol Producers**

Ethanol production facilities are major sources of harmful air pollutants such as volatile organic compounds, carbon monoxide, nitrogen oxides, particulate matter, and other hazardous compounds. In addition to contributing to smog, volatile organic compounds can cause serious health problems such as cancer; carbon monoxide is harmful because it reduces oxygen delivery to the body's organs and tissues. As a result of EPA's enforcement activities, approximately 80 percent of the ethanol production capacity has adequate pollution controls or is in the process of installing controls. Major settlements to date with 27 ethanol producers and grain processors will reduce emissions of harmful air pollutants by over 100,000 tons per year at a combined cost of over \$384 million.

The major settlements concluded in 2006 are:

**AGP Corn Processing** will spend more than \$5.5 million to install pollution control equipment to reduce emissions of harmful air pollutants by 975 tons per year and will pay a \$40,000 civil penalty.

**Cargill, Inc.** one of the nation's largest producers of corn sweeteners, and a producer of domestic vegetable oils and fuel-grade ethanol, will reduce emissions of harmful air pollutants by nearly 25,000 tons per year from 27 corn and oilseed-processing plants in 13 states at an estimated cost of \$130 million. Cargill will pay a \$1.6 million civil penalty and will spend \$3.5 million on supplemental environmental projects.

**MGP Ingredients of Illinois, Inc.** will install air pollution control equipment and replace its existing feed dryers at its Pekin, Ill. facility to reduce emissions of volatile organic chemicals and carbon monoxide by over 1,700 tons per year at a cost of over \$1 million. MGP will pay a \$171,800 civil penalty.

## **Motor Vehicles (On-highway)**

Mobile source pollutants include smog-forming volatile organic compounds and nitrogen oxides, toxic air pollutants such as cancer-causing benzene, and particulate matter or "soot" that are responsible for asthma and other respiratory illnesses. EPA enforces the Clean Air Act provisions governing motor vehicles and engines, including emissions standards for manufacturers of new motor vehicles, passenger cars and light trucks, and heavy duty motor vehicle engines. The requirements are designed to limit harmful emissions from these vehicles.

The following major settlement was concluded this fiscal year.

**DaimlerChrysler Corporation** entered into the largest mobile source settlement in an emission-related defect reporting case. DaimlerChrysler will repair defective emissions controls on nearly 1.5 million Jeep and Dodge vehicles from model years 1996 through 2001 at an estimated cost of \$90 million under the March 2006 settlement. The settlement resolves Clean Air Act violations in which the company failed to properly disclose defective catalytic converters. The company also will pay a \$2 million civil penalty and spend at least \$3 million to implement a supplemental environmental project to reduce emissions from diesel engines currently in use.

## **Animal Feeding Operations**

Participating animal feeding operations entered into over 2,500 Air Compliance Agreements in fiscal year 2006 covering nearly 14,000 farms – swine operations, dairy operations, egg-laying operations, and broiler chicken (meat-bird) operations. Under these agreements, the participating animal feeding operations will take part in a nationwide monitoring study to evaluate air emissions from such operations and EPA will use this data to develop a method for estimating air emissions. The monitoring is expected to begin this winter. Primary goals of the Air Compliance Agreement are to reduce air pollution and ensure compliance with applicable Clean Air Act, Comprehensive Environmental Response, Compensation and Liability Act, Environmental Planning and Community Right-to-Know Act requirements. Additionally, EPA is settling liability for certain past and current potential violations against these animal feeding operations. Under these Agreements, violators will pay nearly \$2.9 million in civil penalties.

## **Criminal Enforcement Cases**

### **Reporting Violations**

State and federal regulators rely on comprehensive and accurate reporting of pollutant data from regulated entities in order to ensure protection of the public and the environment. Individuals or companies that knowingly fail to file required reports or who falsify those reports are subject to criminal prosecution.

The following are major cases concluded this fiscal year.

### **Pacific States Pipe Company**

Charles Matlock, an executive with Pacific States Cast Iron Pipe Company, was sentenced to 12 months and one day in prison and a \$20,000 fine after pleading guilty to violations of the Clean Air Act which involved a rigged stack emissions test. Pacific States, a division of McWane Inc., located in Springville, Utah, manufactures cast iron pipe for the water and sewer industry. McWane, Inc. also pled guilty to violating the Clean Air Act and was sentenced to pay a fine of \$3 million, the largest criminal environmental fine in Utah, and serve a three year period of probation. In 2001, 2002 and 2003, McWane submitted “Emission Inventory” documents that were based on the rigged

stack test and falsely reported to the State of Utah that Pacific State's emissions were at a level that McWane employees knew to be inaccurate.

## **Asbestos**

Asbestos is a human carcinogen. Under federal and state law, individuals who work on asbestos and lead abatement projects are required to take an extensive training course instructing them how to properly and safely remove asbestos, lead and hazardous waste without contaminating either themselves, co-workers, or members of the public. The failure to properly follow the regulations regarding the safe removal of asbestos (so called "rip and run" violators), including the use of workers who have not received required asbestos removal training or been given the necessary protective equipment to avoid exposure, can result in criminal prosecution.

The following are major cases concluded this fiscal year.

### **ACS Environmental Services**

ACS Environmental, Inc. and Air Power Enterprises, Inc., were sentenced to five years probation and Air Power was fined \$500,000 for conspiracy to defraud the Environmental Protection Agency, the Occupational Safety and Health Administration and the Small Business Administration (SBA). James Schaubach, president of ACS and vice president of Air Power, was sentenced to 21 months in prison, to be followed by 3 years of supervised release, and fined \$1.5 million. Nicanor Lotuaco, president of Air Power, was sentenced to five months in jail, followed by five months home detention and three years supervised release, and fined \$1 million. All defendants pled guilty to buying false training certificates for their employees working in the asbestos, lead abatement, and hazardous waste industries and fraudulently obtaining set-aside contracts for minority-owned companies by submitting false statements to the SBA. ACS, located in Chesapeake, VA, and Air Power, located in Portsmouth, VA, received \$37 million in federal contracts, under the SBA's program for minority owned businesses. ACS and Air Power falsely certified that the workers had taken the required courses, passed the exams and were otherwise entitled to work on such projects. The untrained workers conducted asbestos, lead, and hazardous waste abatement at schools, hospitals, and other public and governmental facilities.

### **Longley Jones Management Corporation**

Longley Jones Management Corporation, which manages commercial and residential real estate, including numerous apartment buildings throughout central and upstate New York State, pled guilty to one count of conspiracy to violate the Clean Air Act, commit mail fraud, and seven counts of violating the Clean Air Act. Longley Jones will pay a \$4 million dollar fine, \$3 million of which will be suspended for asbestos clean up at various Longley Jones facilities that the company has already initiated (where it has spent more than \$3 million). The suspended portion of the fine shall also be used to implement an Environmental Compliance Plan, which has been approved by the EPA. EPA criminal investigators who worked jointly with investigators of the New York State Department of Environmental Conservation found that employees of Longley Jones Management

Corporation illegally removed and disposed of regulated amounts of friable asbestos in 98 buildings owned, managed or otherwise controlled by Longley Jones over the past 20 years.

## **FY2006 Water Case Highlights**

Aging municipal sewer systems and urban storm water runoff are significant sources of pollutants causing problems to our nation's waterways. Overflows of raw sewage from sanitary sewer systems contribute to contamination of drinking water sources and other environmental and health concerns and cause beach and shellfish bed closures. In addition, urban storm water runoff from municipal separate storm sewer systems and construction sites can introduce a variety of harmful pollutants including bacteria, organic nutrients, pesticides, hydrocarbons, sediment, oil and grease into rivers, lakes and streams. Ensuring effective and enforceable solutions to these problems has been an EPA enforcement priority since 1998. In FY2006, EPA concluded numerous enforcement actions eliminating and preventing millions of gallons of polluted overflows and run-off from entering waters.

### **Combined Sewer Overflows and Sanitary Sewer Overflows<sup>13</sup>**

Many older municipalities' systems depend on single-pipe "combined sewer systems" designed to carry both storm water runoff and sewage to the treatment facility. When the capacity of combined systems is exceeded during heavy rainfall or snow melt, a mixture of storm water, household sewage and industrial wastewater overflows untreated through sewer outfalls (CSOs) into rivers and lakes. These overflows may also back up through storm water drains onto streets, yards and into basements. Most municipalities depend on "sanitary sewer systems" which transport sewage and industrial wastewater to sewage treatment plants and have separate storm water collection systems. Like combined systems, sanitary sewer systems can become overwhelmed during wet weather events and experience overflows (SSOs). Both combined sewer overflows and sanitary sewer overflows can occur frequently in some municipal systems, reflecting chronic problems.

Often working with states, EPA has concluded major settlements with dozens of the nation's cities bringing critical systems back into compliance and protecting communities from future harm. In the past ten years, EPA has entered into nearly fifty judicial settlement agreements with municipalities to address CSO and SSO violations. States have participated as co-plaintiffs in almost 70% of these actions. The settlement agreements, when implemented, will result in the reduction of billions of gallons of sewage overflows into the nation's waters. These results are achieved through consent decree provisions requiring comprehensive plans to improve the maintenance and operation of systems to reduce overflows, and through long-term capital construction projects that expand capacity to ensure proper treatment. As a result, EPA achieved a 26 million pound reduction in pollution and an 879 million dollar investment in continued pollution reduction .

The following are major cases concluded during fiscal year 2006:

**Hartford Metropolitan District** will evaluate its sewer collection system and take measures to eliminate raw sewage discharges to the Connecticut River and its tributaries at a cost of \$120 million. Hartford Metropolitan District will pay an \$850,000 civil penalty, of which \$425,000 can be used under Connecticut law to fund environmental projects.

**Massachusetts Water Resources Authority (MWRA)** will implement additional controls to further reduce overflows to the Charles River. Ongoing construction projects along with newly proposed work will reduce the planned volume of discharges into the Charles from 28 million gallons to a future total of approximately 7.8 million gallons per year.

**Washington Suburban Sanitary Commission (WSSC)** will reduce raw sewage discharges by more than 26 million gallons per year and eliminate basement backups caused by inadequate capacity or poor operation and maintenance at a cost of \$200 million. WSSC must also implement emergency response and cleanup programs to address all overflows and will undertake a monitoring program in the Anacostia River. WSSC will pay a \$1.1 million civil penalty and also will spend over \$4 million on supplemental environmental projects.

### **Storm Water Discharges**

The discharge of storm water runoff from construction activities (e.g., land development, road construction) can significantly impair the water quality of rivers, lakes, and wetlands. During construction, earth is compacted, excavated and displaced, and vegetation is removed. These activities increase erosion and runoff, thus increasing the amount of sediment transported to receiving waters. Sediment/siltation is the second leading cause of impairment in assessed rivers and streams, the third leading cause of impairment in assessed lakes, ponds and reservoirs, and the leading cause of degrading wetland integrity. In addition to sediment, as storm water flows over a construction site, it can pick up other pollutants like debris, pesticides, petroleum products, chemicals, solvents, asphalts and acids which may also contribute to water quality problems. Storm water discharges from Municipal Separate Storm Sewer Systems (MS4) in urbanized areas are a concern because of the high concentration of pollutants they carry. Storm water picks up and transports pollutants into the MS4 where it is discharged (untreated) to waterways. Urban storm water runoff and discharges from storm sewers are a primary cause of impaired water quality in the United States, contributing 13 percent of impaired rivers and streams, 18 percent of impaired lakes, 55 percent of impaired ocean shorelines, and 32 percent of impaired estuaries. In 2006, over 280 million pounds of sediment were reduced from discharging into waterways as a result of federal enforcement actions.

**City of Dallas** will spend more than \$3.5 million to fill staff positions, inspect industrial facilities and construction sites, and improve management systems at several facilities. Dallas also will construct two wetlands, one along the Trinity River and one near the zoo, at an estimated cost of \$1.2 million as supplemental environmental projects and will pay an \$800,000 civil penalty.

**Hawaii Department of Transportation** will change its operations to reduce storm water runoff by over four tons per year at a cost of \$50 million and will pay a \$1 million civil penalty. The settlement also includes a supplemental environmental project expected to cost over \$1 million.

**Idaho Department of Transportation** will pay an \$895,000 civil penalty for violations of the Clean Water Act during construction activities and will implement new construction and inspection management practices to prevent future discharges.

**James Pflueger** will prevent erosion and restore streams at areas damaged by construction activities on Pflueger's property at a cost of \$5.3 million. Pflueger will pay a \$2 million civil penalty and spend \$200,000 to implement a supplemental environmental project to replace cesspools with improved wastewater systems at residences in a nearby coastal community. Pflueger had previously incurred both civil and criminal penalties under Hawaii law.

## **Criminal Enforcement Cases**

### **Wetlands**

Wetlands are a critical natural resource which both promote wildlife and serve as a "buffer zone" to reduce damage from coastal flooding. Extreme violations of wetlands regulations involving illegal dredging and filling or development can result in criminal prosecution.

The following major case was concluded this fiscal year.

#### **Big Hill Acres**

In one of the most significant wetlands criminal enforcement prosecutions in United States history, Robert J. Lucas, Jr., Robbie Lucas Wrigley, M. E. Thompson, Jr., and two affiliated corporations, Big Hill Acres, Inc., and Consolidated Investments, Inc., were sentenced for defrauding their customers and destroying wetlands. Robert Lucas was sentenced to nine years in prison followed by three years of supervised release and ordered to pay a \$15,000 fine. Robbie Wrigley and M.E. Thompson were each sentenced to 87 months in prison followed by three years of supervised release and ordered to pay a \$15,000 fine. Big Hill Acres, Inc. was fined \$4.8 million and sentenced to five years probation. Consolidated Investments, Inc. was sentenced to 5 years probation and ordered to pay a \$500,000 fine. All the defendants were also liable for a total of \$1.4 million in restitution for wetlands mitigation credits to offset the wetlands destroyed. All five defendants were convicted after trial on Clean Water Act violations for illegally filling hundreds of acres of wetlands during the development of a 2,600 acre subdivision on property in Vancleave, Mississippi known as Big Hill Acres. All of the defendants were also convicted of conspiracy and mail fraud for then selling hundreds of home sites on the filled-in wetlands despite warnings from public health officials that they were illegally installing septic systems in saturated soil that would contaminate the property. Despite warnings and cease and desist orders from the Corps and the EPA, the defendants

continued to improperly install systems that did not conform to state health department regulations in lots that they continued to develop and sell. More than 600 families moved into Big Hill Acres and within several years, a large number of the septic systems failed, causing raw sewage to seep up from the ground and flow across the development. A number of the homes in Big Hill Acres also suffered from slow drainage; brown, foul-smelling water backing up into bathrooms, kitchens, laundries and sinkholes; and standing water on the lots with debris rising to the surface.

## **Reporting Violations**

State and federal regulators rely on comprehensive and accurate reporting of pollutant data from regulated entities in order to ensure protection of the public and the environment. Individuals or companies that knowingly fail to file required reports or who falsify those reports are subject to criminal prosecution.

The following major case was concluded this fiscal year.

### **Wayne County Airport**

Wayne County Airport Authority, which operates Detroit Wayne County Metropolitan Airport, pled guilty to a misdemeanor violation of the Clean Water Act for negligently failing to report a 2001 discharge of turbid water containing airplane de-icing wastes into the Frank and Poet Drain, a waterway that leads to the Detroit River, in violation of the airport's discharge permit. The Airport Authority will pay a fine of \$75,000. An additional \$25,000 will be paid as community service to Friends of the Detroit River, a non-profit organization dedicated to conserving, preserving, and restoring the watershed of the Detroit River. The Airport Authority will also serve a four-year term of probation. In April, 2001, the valve connecting the pond to the sanitary sewer became clogged and storm water mixed with de-icing materials. Airport personnel allowed some 25 million gallons of wastewater to flow directly to the Frank and Poet drain. The discharge was not reported to the state of Michigan, as required. The discharge was discovered after a fish kill was observed where the water entered the Detroit River. As a special condition of probation, the airport will undertake and complete a "Force Main" project, which involves construction and use of a force main to connect a pond at the Airport to sanitary sewer lines leading to the Detroit Water and Sewerage Department's treatment plant in Detroit. The planning of this project has been underway for a number of months, and its cost currently is estimated at approximately \$8.5 million.

### **Ocean Dumping**

During the last decade, EPA, along with the U.S. Coast Guard, FBI and other components of DOJ, has undertaken an extensive initiative to protect the oceans and coastal waters of the United States from illegal dumping of waste oil, sludge, and other hazardous wastes. The initiative began with an investigation of the cruise ship industry and has extended to other commercial vessels such as cargo ships. In addition to violations of environmental legislation such as the Oil Pollution Act, companies have

also been charged with U.S. Criminal Code violations such as conspiracy and obstruction of justice.

The following are major cases concluded in FY2006:

### **Atlantic Breeze**

Wallenius Ship Management Pte, Ltd., a Singapore shipping company, pled guilty to seven felony counts and will pay a \$5 million criminal fine and an additional \$1.5 million community service payment for conspiring to obstruct justice, making false statements, and violating the Act to Prevent Pollution from Ships through the use of a concealed "magic pipe" to illegally discharge oil sludge and oil-contaminated waste from one of its ships. The community service projects, to be administered by the National Fish & Wildlife Foundation, will fund environmental projects in New Jersey. \$2.5 million dollars of the fine will be divided evenly among four former crew members who served as "whistleblowers" to bring the violations to the attention of federal authorities.

### **M/V Friendship**

Karlog Shipping Company Ltd., of Piraeus, Greece pled guilty to obstructing justice by concealing the release of oil into the ocean from the Motor Vessel Friendship. Karlog Shipping was ordered to pay a \$1 million fine, develop a fleet-wide court-monitored environmental management system and serve three years' probation. In addition, Panagiotis Kokkinos, the ship's chief engineer, and Athanasios Chalkias, the ship's fitter, have also each pleaded guilty in connection with their role in ordering crew members to make false statements to the Coast Guard regarding discharges of oil from the ship. Each man was sentenced on October 6 to 30 days in prison and three years probation. In November 2004, a routine Coast Guard investigation discovered evidence that a bypass pipe had been used on the M/V Friendship to route oil around the ship's oil-water separator. Evidence also indicated that the pollution was concealed by maintaining a false oil record book that made it appear that the ship was being operated properly.

### **Discharges into Water Bodies**

EPA's National Pollution Discharge Elimination System (NPDES) regulates the amount of treated and untreated wastewater that can be discharged into the rivers, lakes, streams or other water bodies of the United States.

The following are major cases concluded in FY2006.

The first two cases involved facilities of McWane, Inc. The privately held McWane, Inc. and its divisions are among the largest manufacturers in the world of ductile iron pipe with more than a dozen plants in the United States and Canada. McWane's products are used primarily for municipal and commercial water and sewer installations.

### **Atlantic States Pipe Company**

Following a seven month trial (the longest environmental trial in history) a New Jersey cast iron pipe manufacturer, Atlantic States Cast Iron Pipe Co. (a division of McWane,

Inc.) and four company officials were found guilty of committing flagrant abuses of environmental and worker safety laws including, among others, the regular discharge of oil into the Delaware River, concealing serious worker injuries from health and safety inspectors, and maintaining a dangerous workplace that contributed to multiple severe injuries and the death of one employee at the Phillipsburg, New Jersey plant. The jury returned guilty verdicts against five of the six defendants. Sentencing is scheduled for January 2007.

#### **McWane, Inc.**

McWane, Inc., was sentenced to pay a \$5 million criminal fine, perform a \$2.7 million community service project and serve five years probation in a case involving illegal discharges to surface waters. Three individual defendants also were assessed fines ranging from \$90,000 to \$2.5 million along with probation and/or house detention. The defendants were found guilty of environmental crimes connected with the operation of McWane Cast Iron Pipe Company in Birmingham, Alabama, including conspiracy to violate the Clean Water Act by discharging industrial wastewater through storm drains into Avondale Creek in Birmingham in violation of their permit. In a related count, McWane Inc., and one defendant were convicted of making a false statement to the EPA.

#### **PRASA**

The Puerto Rico Aqueduct and Sewer Authority (PRASA) pled guilty to an indictment charging 15 felony counts of violating the federal Clean Water Act (CWA) through the illegal discharge of pollutants from nine sanitary wastewater treatment plants and five drinking water treatment plants. Under the plea agreement, PRASA is expected to pay a \$9 million criminal fine – the largest fine ever paid by a utility for violating the CWA. In addition, a comprehensive civil settlement was reached between PRASA and the United States of America to resolve repeated environmental violations at 61 wastewater treatment plants throughout the Commonwealth. The case is still awaiting formal sentencing by the court.

#### **Southeastern Louisiana Water and Sewer**

Southeastern Louisiana Water and Sewer (SELA), operates at least 40 sewage treatment facilities throughout St. Tammany Parish, Louisiana. SELA repeatedly violated its NPDES permits, and certain plants were operating without a permit. The discharges from SELA's plants ultimately flowed into Lake Pontchartrain through various streams and rivers. Despite knowing its plants were overburdened and over-capacitated, thus exceeding their permit limits, SELA continued to add more homes and services to the plants. SELA pled guilty to a felony violation of the Clean Water Act and was sentenced to pay a fine of \$2.1 million and serve five years probation. SELA has already expended approximately \$12 million additional dollars since the investigation began to correct the violations.

## FY2006 Land Case Highlights

Under EPA's preventative programs, such as the Resource Conservation and Recovery Act (RCRA) Subtitle C (hazardous waste) and Subtitle I (underground storage tanks), EPA utilizes a regulatory framework establishing provisions to fully protect human health and the environment. EPA's clean up enforcement program establishes environmental cleanup liability to encourage the clean up and sustainable reuse and redevelopment of property, such as brownfields. EPA uses a number of laws and regulations, including Superfund and RCRA Corrective Action, independently and in combination, to address specific cleanup situations.

### Superfund Enforcement

The Superfund statute (officially the Comprehensive Environmental Response, Compensation and Liability Act, "CERCLA") provides EPA with multiple authorities to achieve cleanup and payment for cleanup at Superfund sites. EPA reaches cleanup agreements through negotiation with parties that have been identified as having had association with the site and potentially have liability as a result of that association.

The following are major cases concluded in FY2006:

**EaglePicher Multi-Regional Bankruptcy Settlement** The United States Bankruptcy Court for the Southern District of Ohio approved several settlement agreements totaling over \$16 million with EPA and the states of Michigan, Oklahoma, Illinois, Kansas, and EaglePicher, to address environmental concerns at four contaminated properties in Michigan, Ohio and Illinois. EaglePicher, which owns numerous plants throughout the country, filed for bankruptcy on April 11, 2005. Under these agreements, EaglePicher will transfer title of the contaminated properties to a custodial trust and set aside \$16.5 million to fund the trust. The affected properties and their cleanup will be administered by a court-appointed trustee.

**Many Diversified Interests (MDI) Superfund Site, Houston, Texas** EPA entered into an administrative agreement with Clinton Gregg Investments, Ltd, to perform all remedial design/remedial action work at the Many Diversified Interests (MDI) Superfund Site located in Houston, Texas. As a result of this agreement, lead contamination on the site will be cleaned up to residential use standards. This is the first agreement in which a bona fide prospective purchaser, a purchaser who is protected from prosecution under the Comprehensive Environmental Response, Compensation and Liability Act, will perform the work at a Superfund Site. EPA has spent \$4.4 million at the MDI Site. The estimated cost of the future on-site work to be performed pursuant to the record of decision for operable unit one, is approximately \$6.6 million. The proposed new use of the site,

following completion of all work in the Agreed Order, will be mixed residential/commercial use development.

**San Gabriel Valley (Area 4) City of Industry Superfund Site, Puente Valley, California**<sup>15</sup> Carrier Corporation and its parent company, United Technologies, Inc., will clean up contaminated groundwater at the Puente Valley Operable Unit of the San Gabriel Valley Superfund Site in Southern California. Carrier Corp. will spend an estimated \$26.5 million to build a groundwater cleanup system that will involve the installation of wells to pump out contaminated groundwater and prevent it from continuing to migrate. As part of the settlement, Carrier Corp./United Technologies will spend an additional \$1.5 million for past response costs and civil penalties, a supplemental environmental project associated with the contaminated groundwater at the site, and to monitor upgradient contamination for a total commitment of \$28 million.

**Sheboygan River and Harbor Superfund Site, Sheboygan, Wisconsin** A settlement was reached with Tecumseh Products Company to cleanup a portion of the Sheboygan River and Harbor Superfund Site. This site is a complex polychlorinated biphenyls contaminated river consisting of three portions: the "Upper River," "Lower River" and "Harbor." Tecumseh is the sole party responsible for the Upper River portion of the Site, which is being addressed pursuant to this settlement. Cleanup work at the Upper River portion is estimated to cost approximately \$30 million. This innovative agreement is a work-party substitution settlement that is expected to be a model for future settlements. Under this agreement, Pollution Risk Services and an insurance company, Chubb Corporation, assume Tecumseh's responsibility to clean up the upper portion of the river.

**Upper Columbia River Remedial Investigation and Feasibility Study, Washington State** EPA, DOJ and Teck Cominco entered into an agreement to fund a remedial investigation and feasibility (RI/FS) study of the Upper Columbia River Site, to be conducted under EPA oversight and with the participation of the U.S. Department of Interior, Washington State, the Colville Confederated Tribes and the Spokane Tribe of Indians. The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site, provide information for EPA's Baseline Risk Assessment, and develop and evaluate potential remedial alternatives. A large swath of the Columbia River in Washington State has been contaminated by the company's operations just over the border in Canada. Some provisions in the agreement include \$20 million in escrow to ensure there are sufficient funds to finance the study, dispute resolution and judicial review, upfront payment for EPA oversight and monies for the involvement of Washington State, the Colville Tribes, the Spokane Tribe, and the Department of Interior.

**White King /Lucky Lass Superfund Site, Lakeview County, Oregon** On January 20, 2006, a Consent Decree with Kerr McGee Corporation, Western Nuclear Corporation and Fremont Lumber was entered for the White King/Lucky Lass Superfund Site. The site includes two abandoned uranium mines, and is contaminated with arsenic and radionuclides. The settling defendants agreed to perform the cleanup work and pay most of EPA's past costs and future oversight costs associated with clean up of the site. The estimated cost of the remedy is \$7.9 million. The settling defendants agreed to pay the

U.S. Forest Service \$2.7 million toward its claim of more than \$5 million. Also, the settling defendants agreed to pay a \$50,000 penalty and perform a supplemental environmental project benefitting wetlands with an estimated cost of \$299,000.

## **RCRA Corrective Actions**

The Resource Conservation and Recovery Act (RCRA) regulates hazardous and non-hazardous wastes. The law establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal. Facilities that generate, treat, store, or dispose of hazardous waste are regulated under RCRA. RCRA also mandates when action is needed to clean up contamination at a facility.

The following major case was concluded this fiscal year.

**Giant Yorktown, Grafton, Virginia** EPA entered an Administrative Order with Giant Yorktown, Incorporated. Giant is the current owner/operator of a hazardous waste management facility in Grafton, Virginia. The plant produces unleaded gasoline, diesel fuels, liquefied petroleum gas, butane, furnace oil, petroleum coke, and sulfur and has the capacity to refine approximately 56,000 barrels of crude oil per day. The Order requires Giant to design and implement the remedial action selected by EPA for the facility. Giant Yorktown must prepare a detailed written cost estimate of the total costs of the corrective action required by the Order and to establish and maintain a performance guarantee in the amount of the estimated cost of the work. It is one of the first corrective action orders based on the new model financial assurance language which requires the facility owner to establish and maintain financial assurance for the total cost of completing the remedy.

## **Underground Storage Tanks**

Resource Conservation and Recovery Act (RCRA) Subtitle I regulates underground storage tanks that store petroleum and hazardous substances which can leak into the soil and groundwater, in addition to underground structures, such as basements and subways in densely populated areas causing serious environmental harm and threatening public health.

The following major cases were concluded this fiscal year.

**Carroll Independent Fuel (Carroll)** settled self-disclosed violations of the underground storage tank provisions of RCRA at 32 facilities under a September 2006 administrative agreement. Carroll will pay a \$280,000 civil penalty and spend \$480,000 on supplemental environmental projects. In exchange for Carroll's performance of a third party audit and disclosure to EPA, violations were resolved through reduced penalties. This settlement is the last in a series which addresses more than 60 Carroll facilities in Maryland.

**City of New York** resolved violations of the underground storage tank provisions of RCRA for its over 1,600 underground storage tanks in over 400 locations throughout the

City and will bring all its storage tank systems into compliance under a March 2006 settlement. The City will pay a \$1.3 million civil penalty and spend an estimated \$500,000 or more to implement a centralized monitoring plan. The centralized monitoring plan would monitor from a centralized location the release detection for all the underground storage tank systems operated by the City's Police, Fire and Transportation Departments. This Plan goes beyond what is required by EPA's regulations.

**Tanana Oil** was ordered to permanently close tanks, perform a site assessment and take corrective action for contamination caused by Tanana/Tri-Angle at their abandoned gas station facility located in Edgemere, Maryland under an April 2006 Judicial Default Order and Judgment. Tanana must also pay a \$745,000 penalty.

### **Federal Facilities Enforcement**

EPA holds the federal government accountable for compliance with environmental laws and regulations. This includes federal legislative branch organizations as well as federal executive branch departments and agencies.

The following major case was concluded this year:

**Architect of the Capitol Settlement** In settling a RCRA enforcement action with the Architect of the Capitol, EPA established that federal legislative entities are accountable for compliance with environmental laws and regulations. The Architect is responsible for maintaining and preserving the U.S. Capitol, the Library of Congress, the U.S. Supreme Court and surrounding buildings. The Architect agreed to operate as a RCRA large quantity generator and to improve training of its employees. The Architect will send information to other organizations operating in the U.S. Capitol complex to either apply for their own RCRA identification numbers or use the Architect's waste management services. The Architect will also pay a \$58,500 penalty.

This demonstrates that legislative entities' need to adhere to environmental laws and regulations like other regulated entities. Second, it shows that EPA is sensitive to the security needs of governmental agencies by respecting the U.S. Capitol Police's requests to keep certain information confidential.

### **Criminal Enforcement Cases**

#### **Hazardous Waste Disposal**

Federal and state governments have regulatory systems in place to help ensure the safe handling and disposal of hazardous wastes, which can, if not dealt with properly, cause fires, explosions and contamination of both groundwater and surface waters.

The following major cases were concluded this fiscal year.

**Behzad Kahoolyzadeh**

Behzad Kahoolyzadeh was sentenced to 37 months in jail and \$1.29 million in cleanup costs for conspiracy to improperly store and transport dangerous chemicals, primarily the dry cleaning solvent perchloroethylene (PERC). Kahoolyzadeh was associated with AAD Distribution and Dry Cleaning Services, Inc., one of the largest handlers of dry cleaning waste in California until it was shut down in January 2001. The company charged dry cleaners to pick up, treat and arrange for the disposal of a hazardous dry cleaning compound known as PERC, a cancer-causing chemical that is the number one contaminant of groundwater in Southern California. In order to hide permit violations from city and state inspectors, Kahoolyzadeh and his partners conspired to load drums filled with PERC waste onto trucks before inspections, ship them off-site, and then store them at other facilities that were not permitted to store hazardous wastes. The manifests for these shipments were falsified to conceal these illegal shipments.

**Pyramid Chemicals**

Joel D. Udell and two affiliated businesses, Pyramid Chemical Sales Co. and Nittany Warehouse LP, were sentenced to pay more than \$2 million in restitution and fines for mishandling hazardous wastes in Pottstown, Pennsylvania., and in Rotterdam, the Netherlands, between 1998 and 2000. In addition, Udell must spend six months in home confinement under electronic monitoring and perform 500 hours of community service. The defendants pled guilty to storing hazardous waste without a permit at the former Nittany Warehouse in Pottstown, Pennsylvania., from May 1998 to early 2001, exporting hazardous waste outside the United States without consent of the receiving country, and transporting hazardous waste without manifests and to unpermitted facilities in 2000. Local authorities attempted to get Udell to improve storage of thousands of containers of chemicals, including flammable, corrosive and toxic material stored in deteriorated or broken containers and bags. EPA wound up forcing the defendants to perform a Superfund clean up from July, 2000 to early 2001. During that period, the defendants shipped 29 forty-foot containers of aging chemicals to Rotterdam. The containers stayed at the port for three years when the Dutch refused to permit them to be reshipped because of their poor condition, and the defendants refused to have them repackaged and returned to the United States. The restitution imposed as part of the sentences covers the port operators costs for storing the chemicals for three years, the Dutch government's costs in incinerating almost 300 tons of chemicals at the end of 2003, and EPA's costs in overseeing the warehouse clean up in Pottstown.

**FY2006 Crossmedia Highlights****Chemicals**

Chemicals have become a pervasive and enduring part of our environment. They are used in our manufacturing processes, and they are essential components for consumer and industrial goods. EPA assures that chemicals made available for sale and use in the United States do not pose any adverse risks to human health or to the environment.

The following major cases were concluded this year.

**3M**<sup>13</sup> voluntarily disclosed all of the violations covered by this settlement under the terms of a Toxic Substance Control Act (TSCA) corporate-wide audit agreement. 3M performed a comprehensive management systems review of 28 separate business units and facilities to determine the compliance status of all TSCA-regulated chemicals and processes. As a result of the audit, 3M corrected a number of violations, including failures to notify EPA on new chemicals, late reporting on substantial risk information, and other reporting violations. During the course of the audit, 3M produced valuable, previously unreported information that will help the scientific community to better understand the presence of toxic substances in the environment. Under the April 2006 settlement, 3M agreed to pay an approximately \$1.5 million penalty for those disclosed violations that did not meet all applicable conditions of the Audit Policy.

**DuPont**<sup>14</sup> agreed to resolve violations that the company failed to report substantial risk information about the synthetic chemical Perfluorooctanoic Acid (PFOA) under the Toxic Substances Control Act. Perfluorooctanoic Acid is used in the manufacturing process of fluoropolymers, including some Teflon® products. DuPont will pay \$10.25 million - the largest civil administrative penalty EPA has ever obtained under any federal environmental statute. DuPont also will perform two supplemental environmental projects expected to cost \$6.25 million that will produce valuable information for the scientific community to better understand the presence of PFOA in the environment and any potential risks it poses to the public.

### **Cross-Media Emissions - Vinyl Chloride**

In 2002, EPA developed a multi-media chemical targeting approach utilizing public health and environmental data to identify potential candidates for enforcement. Using this approach, EPA selected six chemicals, one of which was vinyl chloride - a known carcinogen and an ozone precursor. The polyvinyl chloride manufacturing industry was an appropriate candidate for enforcement because it was responsible for the majority of vinyl chloride emissions in the United States. Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products. Exposure to vinyl chloride emissions has been linked to adverse human health effects and cancer. As a result of three EPA enforcement settlements, the vinyl chloride initiative has reduced vinyl chloride emissions by a total of approximately 128,000 pounds.

The following major cases were concluded this fiscal year.

**Formosa Plastics Corporation**<sup>1</sup> agreed to resolve multi-media violations at its Delaware plant and to reduce 36,000 pounds of permitted vinyl chloride emissions – a known human carcinogen, and up to 20,000 additional pounds through a unique incentive program. Formosa will pay a \$450,000 civil penalty and will perform supplemental environmental projects expected to cost \$843,000.

**Oxy Vinyls, L.P.**<sup>1</sup> North America's largest poly vinyl chloride resin supplier agreed to reduce vinyl chloride emissions by over 40,000 pounds a year and to resolve multi-media violations. Oxy will pay a \$140,000 federal civil penalty to be divided equally with the

Louisville Metropolitan Air Pollution Control District and a \$200,000 state-only penalty to New Jersey for New Jersey state-only violations. Oxy also will spend \$1,244,000 to implement supplemental environmental projects.

### **Supplemental Environmental Projects<sup>17</sup>**

Supplemental Environmental Projects (SEPs) are environmentally beneficial actions that a violator agrees to perform as part of an enforcement settlement. SEPs go beyond compliance and provide significant benefits to public health and the environment. EPA enforcement settlements concluded in fiscal year 2006 include 220 cases requiring violators to implement SEPs with a value of over \$78 million. The following settlements are examples of fiscal year 2006 cases that include SEPs with substantial environmental or public health benefits.

**Airgas<sup>18</sup>** a national industrial gas supplier agreed, as part of an administrative settlement for violations relating to the Emergency Planning and Community Right-to-Know Act, to properly dispose of more than 1,500 cylinders recovered by EPA and the Louisiana Department of Environmental Quality during the Hurricane Katrina cleanup. These projects contribute to the hurricane clean up effort in Louisiana and are expected to cost over \$118,000. More information about EPA's response to Hurricane Katrina is available at: [More Information<sup>18</sup>]

**City of Sunland Park (Santa Teresa Waste Water Treatment Plant)** agreed, as part of an administrative settlement resolving Clean Water Act violations, to provide medical treatment to indigent individuals suffering health impacts associated with contacting contaminated Rio Grande River water. The cost of the SEP is \$30,510.

**Motiva<sup>19</sup>** as part of a settlement resolving multi-media violations, agreed to conduct several SEPs: purchase hybrid busses for the Delaware Transit Corporation, place a conservation easement on approximately 1,410 acres of land to prevent further development, restore and create a shellfish habitat, purchase and donate emergency response equipment to the community located near the facility, construct a meteorological station near the refinery, and install and operate a water quality monitoring station in the Delaware River. The total cost of these projects is almost \$6.4 million.

**Raritan Brunswick, L.P.** agreed, as part of an administrative settlement for violations relating to Toxic Substances Control Act 1018 requirements, to replace approximately 221 windows with lead-free, vinyl windows to eliminate the potential hazards of lead-based paint at a cost of more than \$53,000.



# Compliance and Enforcement Annual Results

## FY2006 Compliance Activities Highlights



Environmental Protection Agency  
Office of Enforcement and Compliance Assurance

November 15, 2006

## FY2006 Compliance Assistance Activities Highlights

Compliance assistance is defined by EPA to include activities, tools or technical assistance which provide clear and consistent information to:

- Help the regulated community understand and meet its obligations under environmental laws and regulations
- Aid the regulated community in complying with environmental regulations

Often, EPA partners with compliance assistance providers to develop and deliver compliance assistance resources such as Web sites, compliance guides, fact sheets and training materials.

The FY2006 Compliance Assistance Highlights are listed below under the following categories:

**Federally-recognized Indian Tribes**  
**Federal Facilities**  
**Region-specific Compliance Assistance Projects**

### Federally-recognized Indian Tribes

As a National Priority, EPA is working with tribes to build tribal compliance assurance and enforcement capacity and to enhance EPA's direct implementation of federal compliance and enforcement programs in Indian country in key areas. In FY2006 the Tribal Priority focused on three areas: drinking water, schools and solid waste.

The Tribal Priority is also enhancing the ability of EPA and tribes to monitor compliance with federal and tribal laws in Indian country through analysis of readily available, accurate and reliable data and emphasizes increasing training opportunities for tribal inspectors and other tribal environmental professionals.

Following are major Compliance Assistance activities this fiscal year.

- **Profile of Tribal Government Operations** (Tribal Profile)

The Tribal Profile provides federally-recognized Indian tribes with the key information needed to effectively understand the federal environmental regulations that may apply to governmental operations and pollution prevention opportunities to go beyond compliance. The Tribal Profile orients readers to the environmental responsibilities and challenges facing tribes by pulling together widely available material into one convenient and easy-to-use document. In this way, the Tribal Profile is similar to the other thirty-four EPA sector notebooks. The Tribal Profile is one of the tools developed as part of EPA's National Tribal Compliance Assurance Priority.

- **Federal Air Rules for Reservations**

EPA Region 10 established a program to implement the new Federal Air Rules for Reservations (FARR), a regulatory program to protect air quality and human health on 39 Indian Reservations in Idaho, Oregon and Washington. The FARR closes the “regulatory gap” that has existed for years on reservations because state and local Clean Air Act rules do not apply. The FARR also provides important new tools to manage air quality and support tribes to build capacity in order to run their own air quality programs.

Complaint tracking and response is a significant component of FARR implementation. Additionally, fact sheets and brochures were created and distributed, a FARR Web site deployed, notices were published in major newspapers, and training was provided to over thirty tribal staff. In addition, forms and guidance written specifically for small businesses are in the hands of 200 affected sources in time for them to collect emission information for submission to EPA in 2007. Registration workshops were held on reservations with the largest number of sources, along with ongoing outreach and one-on-one support for businesses. For more information go to Region 10 Federal Air Rules for Reservations.

## **Federal Facilities**

EPA gives compliance assistance to the federal government in a variety of ways. EPA works with other agencies on projects and training to improve compliance and improve environmental stewardship programs.

Following are major Compliance Assistance activities in fiscal year 2006.

### **FedCenter**

Since its inception in late 2004 as a partnership between OECA and the Construction Engineering Research Laboratory of the U.S. Army Corps of Engineers, FedCenter has been the place for federal facility staff and managers to obtain timely environmental information, needed compliance assistance tools and real time mechanisms for facility environmental reporting. In 2006, the Center added two major program areas – Clean Up and Natural Resources. Over a dozen federal agencies used FedCenter’s electronic reporting capabilities to comply with new Energy Policy Act requirements focused on the environmental status of nearly 8,000 underground petroleum storage tanks nationwide.

### **EPA Assists Other Federal Government Agencies to Implement Environmental Management Systems**

Executive Order 13148 mandated that all “appropriate” federal facilities have formal Environmental Management Systems (EMS) in place by Dec. 31, 2005 as a means of improving the overall effectiveness and efficiency of environmental programs at federal facilities and ensuring regulatory compliance matters are recognized and addressed. Nearly 2,400 federal facilities, ranging from NASA’s Kennedy Space Center in Florida to

the National Park Service's Grand Canyon Park, are implementing EMSs. Over 40 percent of these facilities declared they conformed to the requirements of the Executive Order by the due date. EPA developed guidance, provided training and conducted on-site EMS reviews to help federal facilities implement EMSs tailored to their operations. EPA trained federal personnel charged with implementing an EMS under the Executive Order. EPA also chairs the interagency workgroup responsible for developing guidance and measures to ensure successful EMS implementation across the federal government.

## **Region-specific Compliance Assistance Projects**

Regional compliance assistance activities include developing tools, conducting workshops and training sessions, responding to questions from the regulated community, developing and distributing guidance materials, providing direct on-site compliance assistance visits and measuring the results of compliance assistance activities.

Following are major Compliance Assistance activities undertaken in specific geographic areas this fiscal year.

### **New England Marina Initiative**

Marinas can potentially cause significant harm to human health, safety and the environment. The most significant problem areas are hazardous waste management, stormwater management, and oil and fuel management.

To address issues in these areas, EPA Region I implemented a successful Marina initiative. To address issues in these areas, EPA Region I implemented a successful Marina initiative. In early FY06, in response to a number of inspections and enforcement actions, several leaders of the EPA New England Marine Trades Association requested further assistance. EPA New England subsequently conducted several meetings with New England Marine Trades Association leaders to identify the most critical issues. Then on March 30, 2006, EPA New England sponsored a marina leadership conference which addressed critical issues in the areas of controlling pressure wash water and managing hazardous waste. The 56 attendees included leaders of: various state marine trades associations; state environmental agencies; and EPA New England's Office of Environmental Stewardship. Since this meeting, EPA has taken action to develop additional assistance tools for marinas, for example, a hazardous waste management training workshop was held September 7, in Rhode Island. There were 70 attendees at this event including nearly 50 marina owners or general managers and the Director of the RI Department of Environmental Management. For more information on this initiative see EPA New England's Marina Web site.

### **EPA Region 2 Colleges and Universities Initiative: Environmental Results from an Integrated Strategy**

The goal of this initiative was to improve environmental compliance and safety at main and off-site college and university facilities; to change the culture at these facilities to one in which environmental compliance is a priority; to ensure compliance in the entire

sector, not just those reached through inspections; and, to have the sector implement permanent changes. Region 2 used a combination of tools to address compliance issues in this sector. The region started with compliance assistance to educate and inform the regulated community of their obligations and to assist them through development of tools requested by the sectors and dissemination of these tools at seminars and workshops. The region sent mailings to all facilities in the sector and heavily marketed the use of compliance incentives programs such as the audit policy to encourage facilities to assess their own environmental compliance and to voluntarily correct any deficiencies found. To ensure that compliance would be achieved, the region also conducted inspections and issued enforcement actions. The region also promoted voluntary programs to encourage sustained compliance.

<b>Colleges and Universities</b>	<b>FY2006 Results</b>
Universe	375
Region 2 inspections	5
Enforcement actions from these inspections	1
Resultant penalty actions	1 (\$183,000)
Settlements	1 (\$99,000)
Audit agreements	3
Voluntary disclosures	19 covering 33 facilities (\$4,712,308 for 24 resolved)
Violations corrected	436

For more information see Region 2 Compliance Web page on Colleges & Universities.

### **EPA Region 7 Outreach to the Ammonia Refrigeration Industry to Reduce Accidents and Chemical Releases**

One goal of EPA's Risk Management Program is to prevent or reduce chemical accidents. To identify the highest risk and highest return on investment areas, EPA Region 7 analyzed ten years (1994 – 2004) of accident history data submitted by industry to EPA in Risk Management Plans (RMPs). This analysis revealed that the ammonia refrigeration industry (facilities such as cold storage or warehouses) accounts for 8% of the Region 7 regulated RMP facilities, yet is responsible for 33% of all accidents and 44% of all repeat accidents in the Region.

To address this problem, Region 7 developed, published, distributed and marketed the "Accident Prevention and Response Manual for Anhydrous Ammonia Refrigeration System Operators." March 2006 (PDF, 1.57 M, 80 pages, About PDF) The manual outlines best practices in accident prevention and provides tips that system operators can use to eliminate causes of ammonia accidents. Distribution has included 133 RMP refrigeration operators in Region 7 and compliance assistance partners in all EPA regions and Headquarters. Since the manual was placed on the web, it has had nearly 123,000 hits! This is especially impressive because there are only about 32,000 total ammonia refrigeration facilities nationwide.

## FY2006 Compliance Incentives Case Highlights

EPA is committed to a strong enforcement program that achieves environmental protection by deterring violators, bringing violators into compliance, correcting damage to the environment and ensuring that those who fail to comply do not put those who follow the law at an economic disadvantage. EPA uses its compliance incentive policies to

- Promote self-policing
- Improve environmental management practices
- Reduce pollution in the environment

Corporate-wide auditing agreements are an additional mechanism to implement the audit policy and for the regulated community to use in assessing and maintaining compliance with federal environmental laws. Such agreements may help to eliminate redundancies by consolidating transactions, provide additional time to determine whether suspected violations have occurred or are occurring, and maximize penalty certainty.

The following is a FY2006 settlement that illustrates the benefit of corporate-wide auditing agreements.

- Adelphia Communications Corporation in June 2002 filed for Bankruptcy under Chapter 11. As part of its reorganization to emerge from Bankruptcy, Adelphia sought to restructure its payment obligations and to sell its assets to Time Warner NY Cable LLC and Comcast Corporation. In order to ensure its facilities were in compliance with environmental requirements, Adelphia voluntarily approached EPA to address its potential violations of environmental laws at its facilities prior to finalization of the company sale. Adelphia conducted an audit of 2,000 facilities. Under the August 2006 settlement Adelphia agreed to pay civil penalties totaling \$142,500 resolving multi-media violations.



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# Compliance and Enforcement Annual Results: Important Environmental Problems / National Priorities: Air Toxics

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## Problem

Toxic air pollutants are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive or birth defects, or adverse environmental impacts. These pollutants come from a wide variety of sources, including industrial and utility operations, as well as smaller manufacturing and commercial sources. Human exposure to air toxics is widespread throughout the nation. EPA regulates 187 air toxics - known as hazardous air pollutants (HAPs) - by developing Maximum Achievable Control Technology (MACT) standards. EPA has made it a National Priority to address industries that have a high incidence of non-compliance with these regulations in order to reduce public exposure to toxic air emissions.

## Key Results:

FY 2006 Annual Results

Pollutants Reduced (lbs)	Investment Pollution Control (\$)	Civil Penalties (\$)
356,945	1,344,442	1,344,738

Since establishing Air Toxics as a National Priority in 2004, EPA has reduced emissions of these pollutants by 680,000 pounds in targeted sectors through enforcement and compliance actions. EPA is well positioned to meet its goal of 750,000 pounds by October 2007.

## Highlights:

- The national leak detection and repair (LDAR) initiative was key in attaining pollutant reductions within the Air Toxics Enforcement Priority. LDAR regulations require regular monitoring of connectors, valves, and pumps. If leaks are found, they must be repaired promptly. If left undetected and unrepaired, even minor leaks could result in substantial emissions of hazardous air pollutants that might adversely affect public health and the environment.
- EPA focused part of their LDAR evaluation efforts on the pharmaceutical industry and

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achieved over 50% of the FY 2006 national air toxics emission reductions from three enforcement cases. These three actions will reduce hazardous air pollutant emissions by 181,962 pounds.

1. In the first case, EPA brought an action against Abbott Laboratories, requiring the company to reduce hazardous air pollutant emissions by 69,433 pounds, do two supplemental environmental projects (SEPs) costing a total of \$418,300, and pay a \$57,372 penalty.
2. In an action against Cognis Corporation, the company will reduce hazardous air pollutants by 49,049 pounds, do two SEPs costing a total of \$310,000, and pay a civil penalty of \$70,000.
3. In a third action, Archer Daniels Midland will reduce hazardous air pollutant emissions by 63,480 pounds, do two SEPs costing a total of \$1,020,000 and pay a penalty of \$325,000.

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# Compliance and Enforcement Annual Results: Important Environmental Problems / National Priorities: Concentrated Animal Feeding Operations (CAFO)

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### Problem:

Concentrated animal feeding operations are a National Priority for the Environmental Protection Agency's enforcement and compliance assurance program due to the impact of large animal feedlots on water quality. During wet weather events, water flows from animal feedlots transporting nutrients such as nitrogen and phosphorus, as well as other pollutants including bacteria, pesticides, antibiotics, hormones, and trace elements including metals to local waterways. Impacts on ecosystems and human health include contamination of public drinking water sources and private well water, recreational and commercial fish kills and advisories, and beach closings.

### Key Results:

FY 2006 Annual Results

Pollutants Reduced (lbs)	Investment Pollution Control (\$)	Civil Penalties (\$)
12,197,786	9,706,449	400,750

### Case Highlights:

In response to numerous citizen complaints, EPA took enforcement against Alan Ritchey Dairy in Oklahoma for violations of the Clean Water Act that will result in preventing over 3 million pounds of nutrients per year from entering the Red River. This large concentrated animal feeding operation (CAFO) violated its National Pollutant Discharge Elimination System (NPDES) permit by over-applying manure and wastewater, improperly disposing of animal carcasses, improperly storing manure and bedding materials, and having unauthorized discharges to waters of the U.S. EPA required the implementation of corrective measures at a total cost of more than \$500,000, including the installation of appropriate containment (i.e., lagoons and concrete pad), ground water monitoring and recovery wells, and proper carcass disposal. In addition, Alan Ritchey Dairy will pay \$200,000 in civil penalties and will implement a supplemental environmental project to plant buffer strips valued at \$100,000.

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# Compliance and Enforcement Annual Results: Important Environmental Problems / National Priorities: Municipal Sewer Overflows (Combined Sewer & Sanitary Sewer Overflows)

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### Problem:

Combined sewer overflows (CSOs) cause environmental problems when heavy rainfall exceeds the storage capacity of pipes and/or water treatment plants, discharging untreated sewage, stormwater, toxic materials, and industrial wastewater into rivers, lakes, and oceans. Untreated sewage contains high levels of nutrients which cause low oxygen levels resulting in dead zones in aquatic environments and fish mortality. Bacteria residing in untreated sewage overflows can contaminate the public drinking water supply, endanger human health for individuals participating in recreational activities such as swimming and boating, and limit access to beaches. Fish and wildlife advisories often result from bacterial contamination of seafood. CSOs pose particularly significant risks to human health when this activity occurs near sources of drinking water given that the discharge often contains a high concentration of bacteria and pathogens.

Similarly, when sanitary sewer systems that collect and transport sewage to public water treatment facilities release untreated sewage into local rivers, streams, and coastal zones during particularly high rainfall, and when equipment, system design, operation, and maintenance is faulty, environmental damage and threats to human health can occur. Bacteria, pathogens, nutrients, untreated industrial wastes, oil, pesticides, wastewater solids, and debris enter waterways when sanitary sewers overflow into waterways causing human health risks including diseases that range in severity from mild gastroenteritis to life-threatening ailments, such as cholera and infectious hepatitis. EPA focuses on sanitary sewer systems that are near public drinking water intakes, endangered and threatened species and habitats, national marine sanctuaries, commercial fishing sites and shellfish beds, waters designated as "outstanding national resource waters," and where waterborne recreational activities such as swimming and boating occur. Areas with prior water quality impairment also receive prioritized attention.

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Pollutants Reduced (lbs)	Investment Pollution Control (\$)	Civil Penalties (\$)
26,291,797	928,795,370	1,834,512

### Case Highlights:

#### CSOs:

Massachusetts Water Resources Authority (MWRA) will implement additional controls to further reduce overflows to the Charles River . Ongoing construction projects along with newly proposed work will reduce the planned volume of discharges into the Charles from 28 million gallons to a future total of approximately 7.8 million gallons per year. [\[More Information\]](#)

#### SSOs:

Washington Suburban Sanitary Commission (WSSC) will reduce raw sewage discharges by more than 26 million gallons per year and eliminate basement backups caused by inadequate capacity or poor operation and maintenance at a cost of \$200 million. WSSC must also implement emergency response and cleanup programs to address all overflows and will undertake a monitoring program in the Anacostia River . WSSC will pay a \$1.1 million civil penalty and will spend over \$4 million on supplemental environmental projects . [\[More Information\]](#)

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# Compliance and Enforcement Annual Results: Important Environmental Problems / National Priorities: New Source Review and Prevention of Significant Deterioration

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### Problem:

Modifying a source to increase capacity or extend its life has the potential to considerably increase the amount of pollution from the source. These projects can release nitrogen oxides (NOx), sulfur dioxide (SO2), and other harmful air pollutants. These pollutants contribute to respiratory illness and heart disease, contribute to the formation of acid rain, reduce visibility, and can be transported over long distances before deposition on land or water. The Clean Air Act (CAA) requires installation of state-of-the-art pollution controls when new sources of emissions are constructed or when existing sources are modified in a manner that increases air pollution. These requirements are identified as New Source Review/Prevention of Significant Deterioration (NSR/PSD). Noncompliance with the NSR/PSD provisions of the CAA results in inadequate control of emissions and the release of thousands of tons of illegal pollution into the atmosphere each year.

### Key Results:

FY 2006 Annual Results

Pollutants Reduced (lbs)	Investment Pollution Control (\$)	Civil Penalties (\$)
134,616,000	310,100,000	525,000

### Case Highlights:

- **Alabama Power Company** - EPA entered a partial settlement agreement for allegations of NSR violations at the Alabama Power Company James H. Miller, Jr. Plant in Jefferson County, Alabama. The pollution controls and other measures are expected to cost more than \$200 million, and will result in emission reductions of 4,940 tons per year (TPY) of NOx, 29,365 TPY of SO2, the retirement of \$4.9 million in SO2 allowances, and a \$100,000 penalty.
- **Minnkota Power Cooperative and Square Butte Electric Cooperative** - EPA settled a

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case alleging violations of NSR provisions against Minnkota Power Cooperative and Square Butte Electric Cooperative that will result in emission reductions of approximately 23,600 TPY of SO<sub>2</sub> and more than 9,400 TPY of NO<sub>x</sub> from the Milton R. Young Station near Center, North Dakota. The settlement also results in the installation of \$100 million in pollution control technology, an \$850,000 civil penalty, and a 5 megawatt Wind Energy environmental project.

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# Compliance and Enforcement Annual Results: Important Environmental Problems / National Priorities: Petroleum Refining

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### Problem:

EPA identified the petroleum refining industry as a national priority to address the widespread environmental violations detected across the industry. Starting in the 1980s, significant expansion activity occurred at individual refineries, it was expected that state permits would include expanded requirements for addressing the increase in emissions; yet, this was not happening. In fact, the failure to meet the regulatory requirements addressing emissions increases as a result of facility expansion represented much of the non-compliance being identified in the industry. Ranked against 17 other sectors, annual air emissions from the petroleum refining sector were 1 st for volatile organic compounds, 1 st for sulfur dioxide, 2 nd for nitrogen oxide, 4 th for carbon monoxide, and 8 th for particulate matter (PM 10 ). Based on 1994 TRI data, annual average toxic emissions for these facilities were 422,904 pounds. The air pollutants released contribute to respiratory illness and heart disease, contribute to formation of acid rain, reduce visibility, and can be transported over long distances before deposition on land or water.

### Key Results:

FY 2006 Annual Results

Pollutants Reduced (lbs)	Investment Pollution Control (\$)	Civil Penalties (\$)
292,104,200	2,073,221,396	14,161,163

At the end of FY 2006 85 refineries, operating in 25 states, representing nearly 77% of domestic refining capacity, are now subject to pollution reduction agreements; negotiations are ongoing with refiners representing an additional 11% of capacity.

### Case Highlights:

- In FY 2006 EPA reached a comprehensive Clean Air Act agreement with ExxonMobil that is expected to reduce harmful air emissions by more than 53,000 tons per year at the

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company's seven U.S. petroleum refineries. The seven refineries, located in five states, represent approximately 11 percent of the total refining capacity in the United States . Today's settlement is the 17th in a joint DOJ-EPA initiative to reduce pollution in domestic petroleum refineries nationwide, bringing nearly 77 percent of domestic refining capacity under consent decree.

- As a result of the agreement, emissions of nitrogen oxide (NO X ) will be reduced by nearly 11,000 tons per year and sulfur dioxide (SO 2 ) by over 42,000 tons per year. In addition, the company will upgrade its leak detection and repair practices, minimize flaring of hazardous gases, reduce emissions from its sulfur recovery plants and adopt strategies to ensure the proper handling of hazardous benzene wastes at each refinery. ExxonMobil has estimated that the capital cost of the injunctive relief program will be approximately \$571 million.

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# Compliance and Enforcement Annual Results: Important Environmental Problems / National Priorities: Stormwater

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### Problem:

Stormwater runoff transports water carrying contaminants directly over land into waterways from large urban areas, construction sites, and municipal separate storm sewer systems and is one of the leading causes of water quality. Typical stormwater pollutants that impair waterways include sediment, bacteria, organic nutrients, hydrocarbons, metals, oil, and grease. When untreated stormwater flows directly into rivers, lakes, streams, and coastal zones, the quality of drinking water, access to recreational areas for boating and swimming, commercial fishing, and endangered species and habitat decline significantly. Stormwater contributes to 55% of water quality impairment in ocean shorelines, 13% of stream/river impairment, 18% of lake impairment and 32% of estuary impairment.

### Key Results:

FY 2006 Annual Results

Pollutants Reduced (lbs)	Investment Pollution Control (\$)	Civil Penalties (\$)
194,807,116	149,813,726	6,574,958

### Case Highlights:

James Pflueger will prevent erosion and restore streams at areas damaged by construction activities on Pflueger's property at a cost of \$5.3 million. Pflueger will pay a \$2 million civil penalty and spend \$200,000 to implement a supplemental environmental project to replace cesspools with improved wastewater systems at residences in a nearby coastal community. Pflueger had previously incurred both civil and criminal penalties under Hawaii law. [\[For More Information\]](#)

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