United States Environmental Protection Agency

Office of Enforcement and Compliance Assurance

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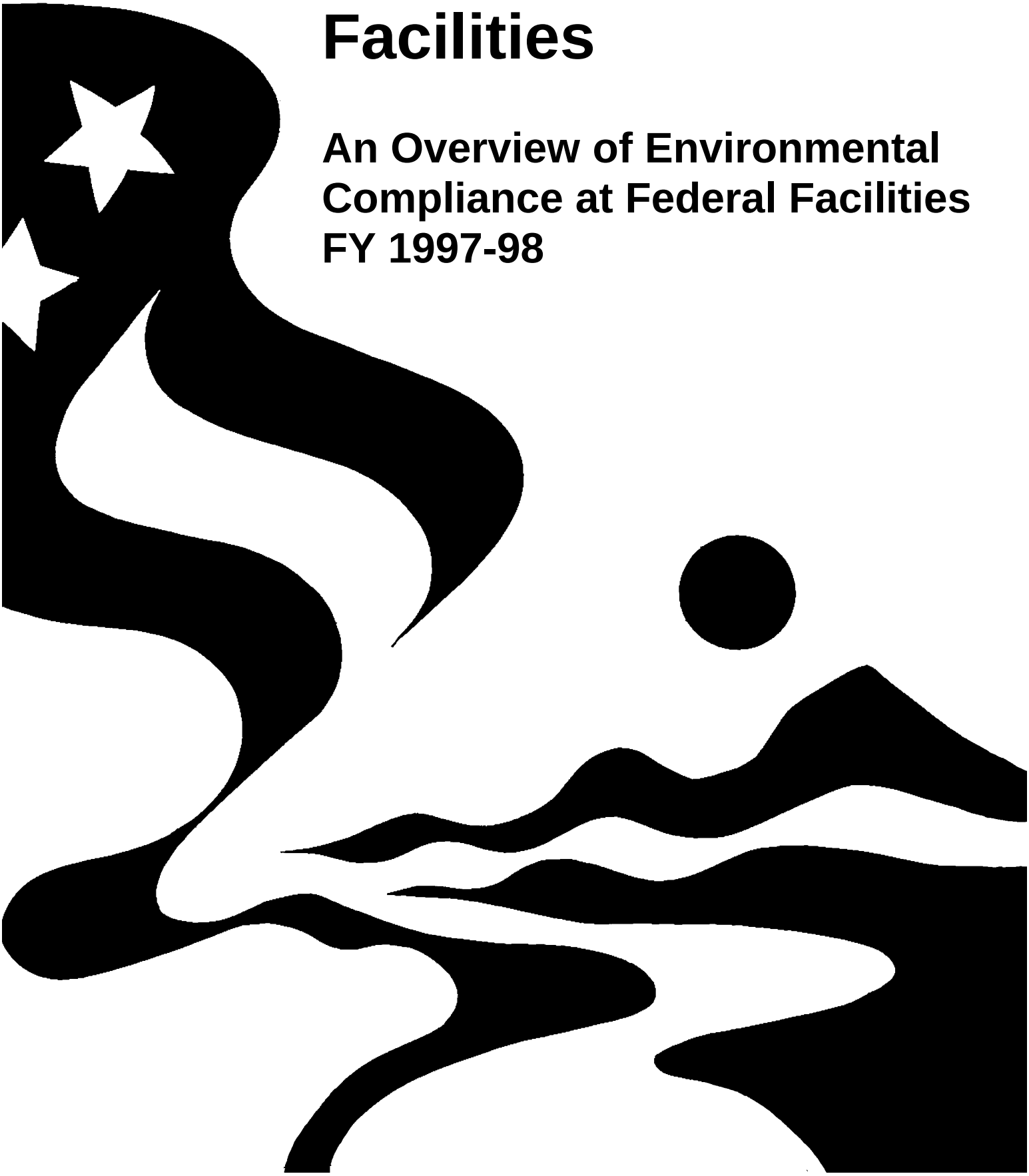
The State of Federal Facilities

An Overview of Environmental Compliance at Federal Facilities FY 1997-98



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ACRONYMS

Acronym	Definition
AIRS	Aerometric Information Retrieval System
CAA	Clean Air Act
CEI	Compliance Evaluation Inspection
CFA	Civilian Federal Agency
CWA	Clean Water Act
CWS	Community Water System
DOD	Department of Defense
DOE	Department of Energy
EPCRA	Emergency Planning and Community Right-to-Know Act
FFCs	Federal Facilities Coordinators
FFCA	Federal Facility Compliance Act (Agreement)
FFEO	Federal Facilities Enforcement Office
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FUDS	Formerly Used Defense Site
GOCO	Government-Owned Contractor-Operated
IDEA	Integrated Database for Enforcement Analysis
HAP	Hazardous Air Pollutant
JOCO	Jointly-Owned Contractor-Operated
LQG	Large Quantity Generator
NAAQS	National Ambient Air Quality Standards
NCDB	National Compliance Database
NESHAPs	National Emissions Standards for Hazardous Air Pollutants
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards

Acronym	Definition
NSR	New Source Review
NTNCWS	Non-Transient Non-Community Water System
OECA	Office of Enforcement and Compliance Assurance
PCS	Permit Compliance System
POGO	Privately-Owned Government-Operated
PWS	Public Water System
PWSS	Public Water System Supervision
RCRA	Resource Conservation and Recovery Act
RCRIS	RCRA Information System
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
SEPs	Supplemental Environmental Projects
SIC	Standard Industrial Classification
SNC	Significant Noncompliance (Noncomplier)
SQG	Small Quantity Generator
TNCWS	Transient Non-Community Water System
TRI	Toxics Release Inventory
TRIS	Toxics Release Inventory System
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facility

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I. INTRODUCTION

EPA's Federal Facilities Enforcement Office (FFEO), within the Office of Enforcement and Compliance Assurance (OECA), periodically assesses federal facility performance with respect to environmental statutes and programs. The last assessment, *The State of Federal Facilities: An Overview of Environmental Compliance Status at Federal Facilities, FY 1995-96,* was published in June 1998. This *State of Federal Facilities* report examines federal facility environmental performance during FY 1997 and FY 1998. Where appropriate and when data are comparable, this report also examines pre-FY 1997 data.

Federal facilities are generally subject to the same environmental statutes and regulations as commercial entities. EPA, in conjunction with the states, has oversight responsibility for federal facility environmental programs. To fulfill its oversight responsibility, FFEO conducts a broad range of activities, including:

- Compliance oversight and enforcement;
- Training and compliance assistance; and
- Review of federal agency environmental plans and programs.

Through its network of Regional Federal Facilities Coordinators (FFCs) and state contacts, FFEO works with appropriate facility personnel to ensure that they take the necessary actions to prevent, control, and abate environmental pollution.

Environmental Requirements

Environmental requirements potentially affecting federal facilities range from federal statutes and their implementing regulations to state and local laws and ordinances. This report summarizes federal facility data during FY 1997 and FY 1998 with respect to the following seven major environmental statutes and programs:

- ***Resource Conservation and Recovery Act (RCRA)*** -- RCRA Subtitle C and its associated amendments regulate the generation, transport, storage, treatment, and final disposal of hazardous waste.
- ***Clean Water Act (CWA)*** -- Under the CWA, EPA or approved states issue National Pollutant Discharge Elimination System (NPDES) permits that establish effluent limits for all municipal and industrial wastewater discharges.
- ***Clean Air Act (CAA)*** -- The CAA authorizes EPA to establish emission control standards to achieve the air quality goals set forth in the National Ambient Air Quality Standards.

- ***Safe Drinking Water Act (SDWA)*** -- The Public Water System Supervision (PWSS) program authorized by SDWA enables EPA to set standards to control both man-made and naturally occurring contaminants. In most cases, states have primary responsibility for oversight and enforcement under SDWA.

- ***Toxic Substances Control Act (TSCA)*** -- Under TSCA, EPA identifies and controls the manufacture, process, distribution, use, and disposal of existing and new chemical substances and mixtures.

- ***Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*** -- Under FIFRA, EPA has the authority over the sale, distribution, and use of pesticide products.

- ***Toxics Release Inventory (TRI)*** -- Under §313 of the Emergency Planning and Community Right-to-Know Act (EPCRA), EPA provides information about toxic chemicals to the public through an annual report of releases of such chemicals by industrial and other facilities.

The information contained in this report is drawn from many sources within and across the various EPA environmental program offices. The starting point for the analysis is the **Integrated Database for Enforcement Analysis** (IDEA), which is a mainframe information management system that draws upon several other EPA databases, including:

- ***RCRIS*** -- The Resource Conservation and Recovery Act Information System is the mainframe database that tracks hazardous waste handlers under RCRA.

- ***PCS*** -- The Permit Compliance System tracks EPA Regional and state compliance and enforcement data for the NPDES program under the CWA.

- ***AIRS*** -- The Aerometric Information Retrieval System manages aerometric emissions and compliance data on point sources tracked by EPA, state, and local governments in accordance with the CAA.

- ***NCDB*** -- The National Compliance Database is the national repository for compliance and enforcement data collected by EPA under FIFRA, TSCA, and EPCRA §313.

In addition, this report also presents data from the following “stand alone” systems:

- ***SDWIS*** -- The Safe Drinking Water Information System is a national database that tracks public water supply system compliance and

enforcement data collected by EPA Regions and states under the PWSS program of SDWA.

- ***TRIS*** -- The Toxics Release Inventory System tracks releases of chemicals listed in the TRI according to chemical type, quantity, and nature of the release.

Organization of the Report

Previous versions of the *State of Federal Facilities* report were organized by individual media or programs (i.e., separate chapters devoted to RCRA, CWA, etc.). This report adopts a multi-media approach in which the data are organized to address the following basic questions:

- What is the universe of federal facilities that are regulated/affected under each of the environmental programs? (Section II – Regulated Universe)
- What is the level of inspection activity at federal facilities for each of the environmental programs? (Section III – Inspections)
- What are the current trends in compliance? (Section IV – Compliance Rates)
- What actions are taken to address noncompliance? (Section V – Enforcement Actions)

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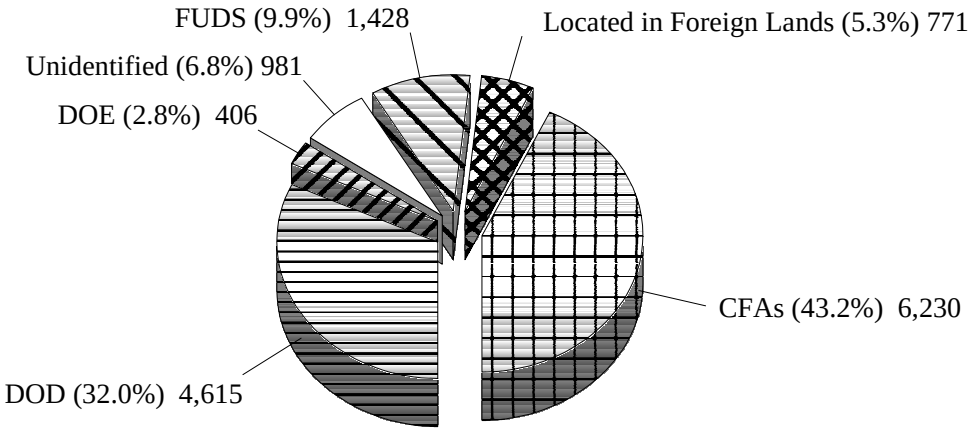
II. REGULATED UNIVERSE

Although all federal facilities are potentially subject to environmental regulations, most are not involved in activities that would trigger requirements to comply with regulations. According to IDEA, there are approximately 14,400 federal facilities that engage in some type of activity directly affected by environmental requirements.[1] These facilities can be grouped into six broad categories – Department of Defense (DOD), Department of Energy (DOE), Civilian Federal Agencies (CFAs), Formerly Used Defense Sites (FUDS), federal facilities located in foreign lands, and unidentified federal facilities (**Exhibit 1**).

Exhibit 1

Federal Facilities by Agency Category (FY 1998)

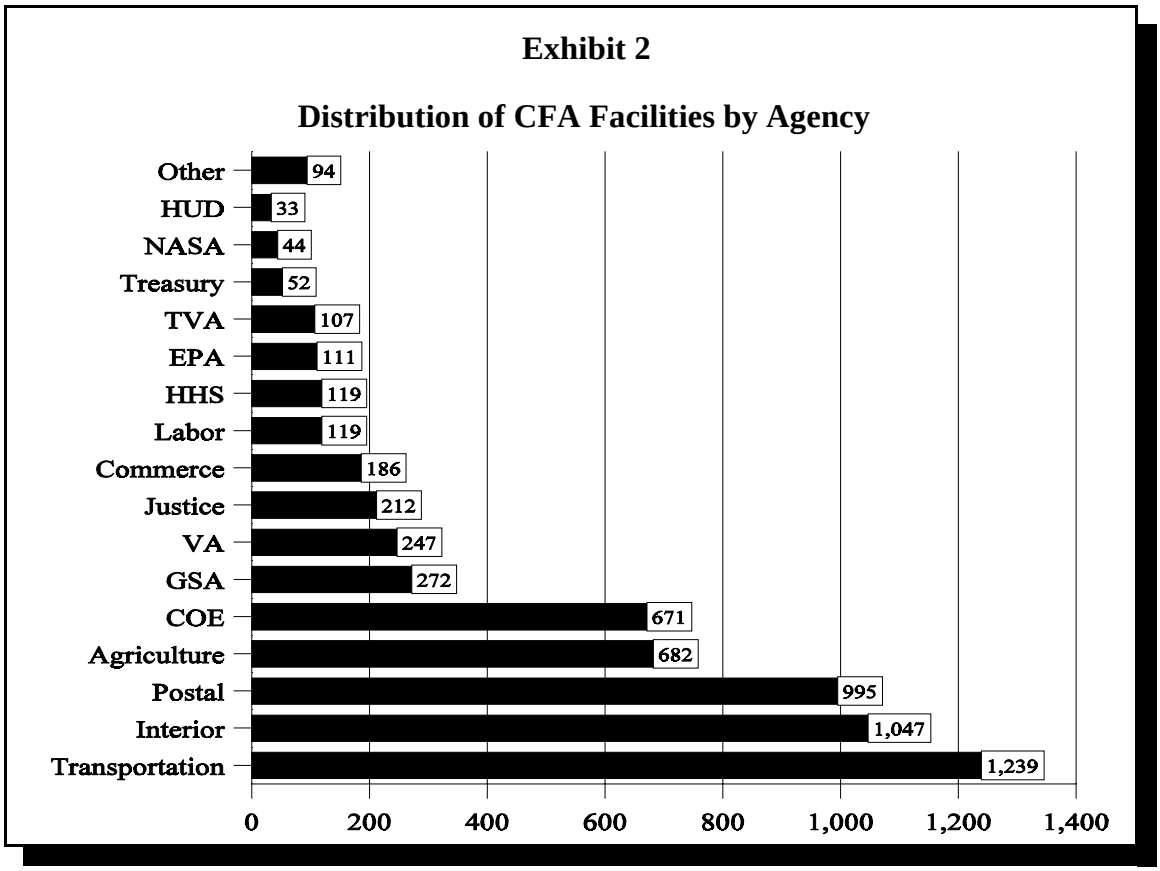


Total = 14,431 federal facilities

DOD and DOE facilities typically include large installations (e.g., military bases, storage depots), manufacturing/fabrication plants, and laboratories/research facilities. The universe of CFA facilities is somewhat more diverse and includes organizations such as the Department of the Interior, General Services Administration, Department of Justice, Tennessee Valley Authority, Environmental Protection Agency, and many others.

Exhibit 2 shows the distribution of CFA facilities according to individual agencies. Department of Transportation facilities comprise the largest single share (19.9 percent) of all CFAs, followed by the Department of Interior (16.8 percent), the Postal Service (16.0 percent), the Department of Agriculture (10.9 percent), and the Corps of Engineers (10.8%).

[1] Because SDWIS is a stand alone database, the facility total derived from IDEA does not include federally-owned public water supply systems.



Note: Differences in the distribution of CFA facilities relative to the FY 1995-96 State of Federal Facilities report are primarily due to the removal of outdated facility information in the Federal Facilities Information System.

Missions of the Federal Agencies

DOD is charged with defending the interests of the United States anywhere in the world. As such, DOD maintains thousands of installations to provide the necessary infrastructure for the armed services to meet this mission. Installations range in size from a few acres to thousands of square miles; their missions range from logistics and training to manufacturing and rebuilding aircraft and ships. Many of these installations are the equivalent of small cities, and thus they possess all of the infrastructure (e.g., hospitals, sewage treatment plants, roads, airports) associated with city environments. Much of the support activity associated with DOD's mission is industrial, therefore, DOD installations face compliance issues relating to air and water pollution and solid/hazardous waste generation.

DOE is involved in electric power generation and transmission, fuel research, petroleum storage, and nuclear weapons research and production. Many of DOE's approximately 400 installations are dedicated to laboratory research. DOE laboratories work on a variety of issues including solar energy, battery development, energy transmission methods, atomic energy, fossil fuels, and nuclear weapons. Some laboratories are located on large compounds such as

Savannah River, Los Alamos, and Oak Ridge, while others are part of university systems such as the Fermi Lab in Chicago. Like DOD, the large-scale manufacturing and industrial nature of many DOE activities presents DOE with a broad range of environmental compliance issues.

CFA facilities range in size and scope from single-purpose buildings to extensive multi-purpose compounds. Activities include vehicle fleet management, construction, facility operation, scientific and medical research, materials storage and shipment, and many others. On an individual facility basis, many CFA facilities have few environmental concerns; however, the diversity of CFA activities implies that, as a group, they face environmental compliance issues as extensive as those faced by DOD and DOE facilities.

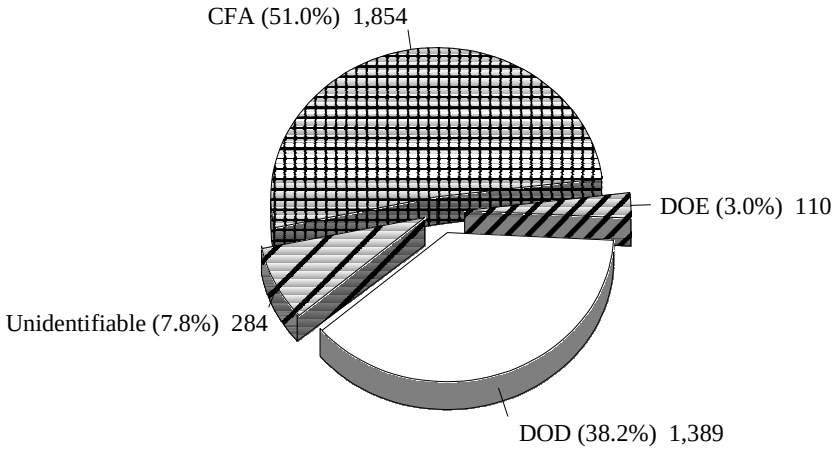
When discussing the entire community of federal facilities, it is important to recognize that not all federal facilities are owned and/or operated by the federal government. At numerous federal facilities and on many public lands, a private party or private parties are involved. Thus, in addition to traditional government-owned government-operated facilities, the federal facility community includes government-owned contractor-operated (GOCO) facilities, privately-owned government-operated (POGO) facilities, jointly-owned and contractor-operated (JOCO) facilities, as well as many other ownership/operating arrangements.

RCRA Universe

In 1998, there were 314,980 handlers (i.e., facilities) in the RCRA universe. The 3,637 federal RCRA facilities represent approximately 1.2 percent of this total. As shown below in **Exhibit 3**, 38.2 percent of the federal facilities are DOD facilities, 3.0 percent are DOE facilities, 51.0 percent are CFA facilities, and another 7.8 percent are unidentifiable by agency category.

Exhibit 3

Universe of RCRA Federal Facilities by Agency Category (FY 1998)



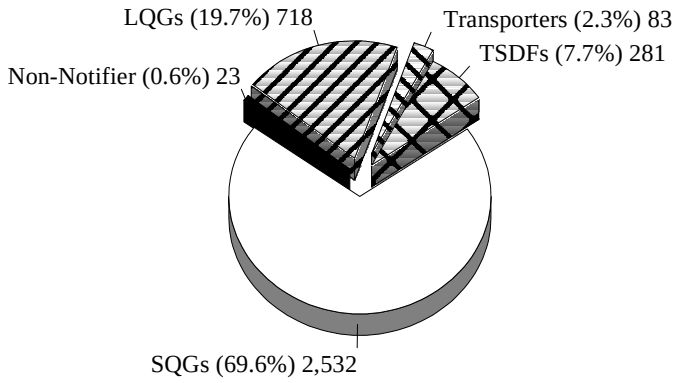
Total = 3,637 RCRA Federal Facilities

RCRA facilities can be divided into three handler types: generators, transporters, and treatment, storage and disposal facilities (TSDFs). Generators of RCRA-regulated waste must obtain an EPA ID number; prepare hazardous waste for transport; and comply with the accumulation and storage, record keeping, and reporting requirements. They are also responsible for tracking waste through a manifest system. The manifest system creates a written record of the chain-of-custody from the time a waste leaves a generator until it reaches its final disposal site. Transporters must obtain an EPA ID number, comply with the manifest system, and address any hazardous waste discharges. TSDFs are subject to record keeping and reporting requirements and technical standards covering treatment and disposal methods, as well as the location, construction, and operation of disposal sites. Finally, both generators and TSDFs may be subject to land disposal restrictions requiring treatment of the waste before it is land-disposed. In addition, a small number of facilities are classified as non-notifiers. Non-notifiers are RCRA facilities that have been identified through sources other than regular reporting and are suspected of engaging in RCRA-regulated activities without proper authority.

As shown in **Exhibit 4**, large and small quantity generators (LQGs and SQGs) make up the largest share of federal RCRA handlers (89.3 percent), followed by TSDFs and transporters (7.7 percent and 2.3 percent respectively). The TSDF universe is used to develop the compliance indicator for RCRA presented in Section IV.

Exhibit 4

RCRA Federal Facilities by Handler Type (FY 1998)



Total = 3,637 Facilities

CWA Universe

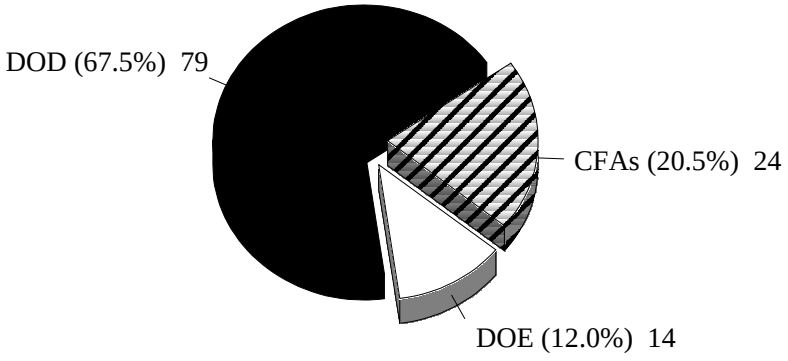
Under the CWA, all point source dischargers of wastewater, including federal facilities, must submit an application for a NPDES permit. NPDES permits may contain water quality-based and/or technology-based standards for effluent discharges, compliance schedules, and monitoring/reporting requirements.

Major (versus minor) NPDES facilities are defined as those that contribute a larger share of pollutants discharged to surface waters.

At the end of FY 1998, federal facilities comprised approximately 1.7 percent (117) of the total universe of 6,786 major facilities regulated under the NPDES program. As shown in **Exhibit 5**, of these 117 facilities, 67.5 percent were DOD, 12.0 percent were DOE, and 20.5 percent were CFA facilities. The universe of NPDES majors is used to develop the CWA compliance indicator presented in Section IV.

Exhibit 5

Major Federal NPDES Facilities by Agency Category (FY 1998)



Total = 117 Facilities

CAA Universe

To meet EPA's National Ambient Air Quality Standards (NAAQS), states typically require new sources of air pollution to obtain preconstruction permits. The type and level of control required by the permit depends on the attainment status of the area, which is based upon air quality with respect to six criteria pollutants (CO, SO_2, NO_x, volatile organic compounds, particulate matter, and lead). Areas meeting the NAAQS are considered in "attainment," while areas not meeting the NAAQS are in "nonattainment." Federal sources wishing to begin construction in nonattainment areas must go through the construction permit review process under the New Source Review (NSR), which allows for industrial growth (i.e., new sources) if

stringent requirements are met, including emissions offsets, state-wide compliance for all sources, public notification, and installation of control equipment to meet the Lowest Achievable Emission Rate. If the federal source is to be located within an attainment area, the permit review process falls under Prevention of Significant Deterioration requirements, which require installation of the Best Available Control Technology, establishment of maximum allowable emissions increases or increments, performance of impact analyses by source, and notification of the public.

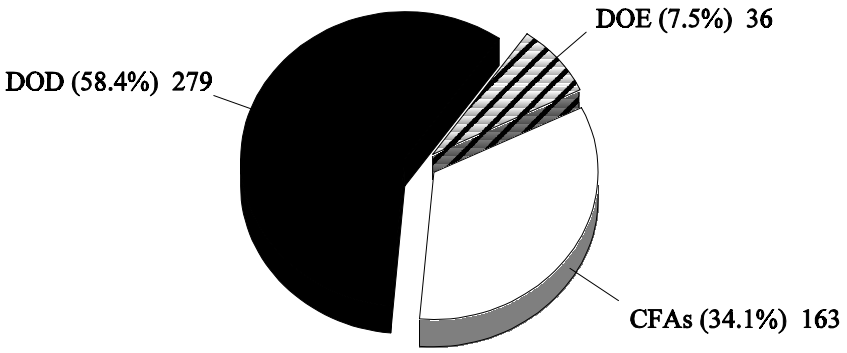
Federal sources, depending on the nature and size of their operations, also may be subject to technology-based New Source Performance Standards (NSPS) for new, modified, or reconstructed stationary sources; health-based National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for new and existing sources within specific categories; and/or Title V requirements designed to address all sources of emissions at a facility under a single permit.

Major CAA Sources -- The definition of major source differs by program. Under the NSPS and NSR, a source is considered major if it emits or has the potential to emit over 100 tons per year (tpy) of a regulated pollutant. For Hazardous Air Pollutants (HAPs), the limit is 10 tpy of any single HAP or 25 tpy of two or more HAPs.

In FY 1998, of the 43,386 major sources regulated under all programs within the CAA, 478 (1.1 percent) were federal sources. As shown in **Exhibit 6**, 58.4 percent of these federal sources were DOD, 7.5 percent were DOE, and 34.1 percent were CFAs. The universe of CAA major sources is used to develop the CAA compliance indicator presented in Section IV.

Exhibit 6

CAA Major Federal Sources by Agency Category (FY 1998)



Total = 478 Major Sources

SDWA/PWSS Program Universe

Federally-owned public water supply systems comprised approximately 2.7 percent (4,550) of the total universe of 168,783 systems regulated under the PWSS program. As shown in **Exhibit 7**, the vast majority (85.7 percent) of these federal systems are owned by CFAs. In particular, the U.S. Forest Service within the Department of Agriculture owns more than 70 percent of these systems.

Under the SDWA/PWSS program the definition of a public water system is "a water system providing water for human consumption through constructed conveyances to at least 15 service connections or an average of 25 individuals daily at least 60 days per year." EPA has interpreted the term human consumption to include drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene. There are three types of public water systems:

- Community water systems (CWS) serve at least 15 service connections used by year-round residents of an area or regularly serves at least 25 year-round residents for 60 days or more per year. The remaining two types of systems are considered non-community water systems because they do not provide water to more than 15 residences year-round.

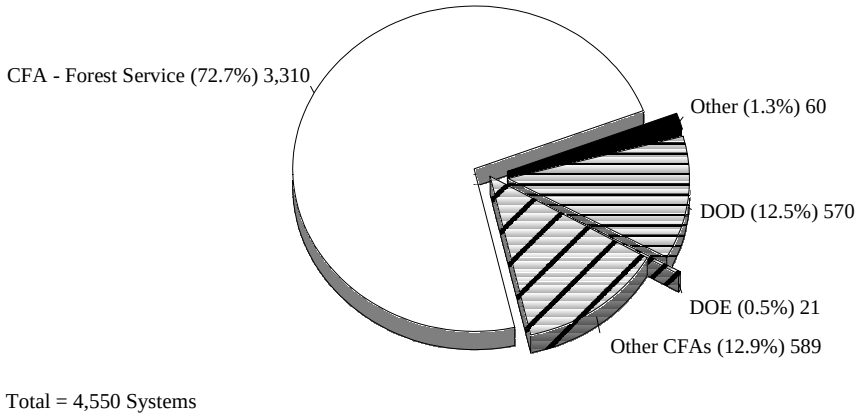
- Transient Non-Community Water Systems (TNCWS) serve transient or seasonal customers in locations such as campgrounds, motels, and gasoline stations.

- Non-Transient Non-Community Water Systems (NTNCWS) regularly serve at least 25 of the same non-resident people per day for at least six months of the year. Examples of NTNCWS include schools, factories, hospitals, and other facilities that have their own water supplies.

The universe of federally-owned public water systems is used to develop the SDWA compliance indicator presented in Section IV.

Exhibit 7

Universe of Federally-Owned Public Water Systems by Agency Category (FY 1997)



TSCA and FIFRA Universe

TSCA and FIFRA are not permit-based compliance programs like NPDES. The number and identity of facilities subject to TSCA or FIFRA may change substantially from year to year. As a result, there are no readily definable TSCA or FIFRA universes. Federal facilities subject to TSCA or FIFRA are identified and targeted for inspections through a variety of less formal means, including: self-reporting by entities of their intent to manufacture regulated substances, third-party requests/complaints, and EPA/state evaluation of publicly available data.

EPCRA/TRI Universe

Established under §313 of the Emergency Planning and Community Right-to-Know Act of 1986, the TRI is a publicly available database containing specific chemical release and transfer information from manufacturing facilities throughout the United States. The TRI is intended to promote planning for chemical emergencies and to provide information to the public regarding the presence and release of toxic and hazardous chemicals in their communities.

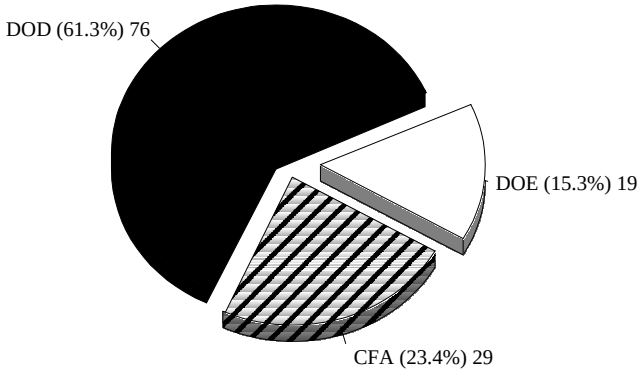
In the private sector, manufacturing facilities [i.e., facilities in Standard Industrial Classification (SIC) codes 20 - 39] having ten or more full-time employees and exceeding certain chemical use thresholds are required to report under the TRI.[2] Federal facilities have been required to report since 1994, regardless of their SIC classification. The threshold for reporting is the manufacture and/or processing of listed chemicals in excess of 25,000 pounds per year for each chemical, and 10,000 pounds per year for each listed chemical for other uses.

[2] In May of 1997, EPA added seven new industry sectors that will begin reporting for 1998.

For 1997[3], the most recent year for which data are available, there were 124 federal facilities that submitted a total of 346 forms under the TRI program. As shown in **Exhibit 8**, most of those reporting were DOD facilities (61.3 percent). Of the CFA facilities reporting (23.4 percent) the most common agency affiliations were NASA, Treasury Department, Department of Agriculture, and Department of the Interior.

Exhibit 8

Universe of Federal Facilities Reporting under TRI (1997)



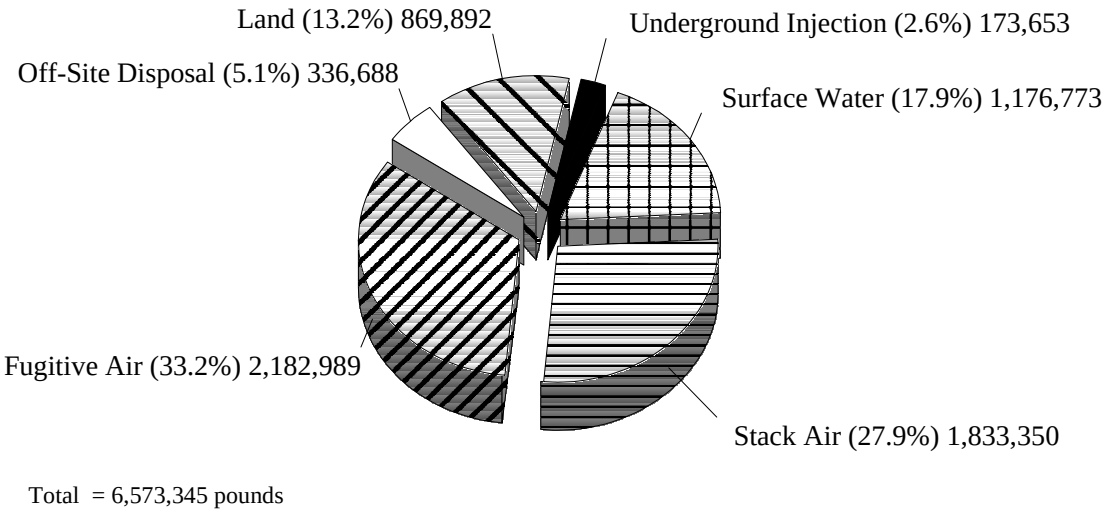
Total = 124 Facilities

As shown in **Exhibit 9**, federal facilities reported on- and off-site releases of more than 6.2 million pounds of TRI chemicals in 1997. The majority of these were comprised by releases to air – fugitive releases (33.2 percent) and stack releases (27.9 percent). Releases to surface water and land comprised an additional 17.9 percent and 13.2 percent respectively.

[3] TRI data are reported on a calendar year basis.

Exhibit 9

TRI On-Site and Off-Site Releases at Federal Facilities (1997)



Total = 6,573,345 pounds

Due to changes in the way the quantity of releases are calculated, the data above are not entirely comparable with that contained in previous *State of Federal Facilities* reports; however, based on the 1997 TRI Public Data Release, the quantity of on- and off-site releases from reporting federal facilities has declined by 30.5 percent since 1995, from 9,457,198 pounds to 6,573,345 pounds in 1997.

Documentation for Exhibits in this Section

Exhibit Title	Information Source	Date of Data Pull	Comments
Federal Facilities by Agency Category	IDEA	2/2/99	--
Distribution of CFA Facilities by Agency	IDEA	2/2/99	--
Universe of RCRA Federal Facilities by Agency Category	IDEA	2/2/99	--
RCRA Federal Facilities by Handler Type	IDEA	2/2/99	--
Major Federal NPDES Facilities by Agency Category	IDEA	3/4/99	--
CAA Major Federal Sources by Agency Category	IDEA	3/1/99	--
Universe of Federally-Owned Public Water Systems by Agency Category	SDWIS & data from federal agencies	10/97	--
Universe of Federal Facilities Reporting under TRI	TRIS	6/1/99	Data derived from direct download from TRIS and 1997 TRI Public Data Release report.
TRI On-Site and Off-Site Releases at Federal Facilities	TRIS	6/1/99	Data derived from direct download from TRIS and 1997 TRI Public Data Release report.

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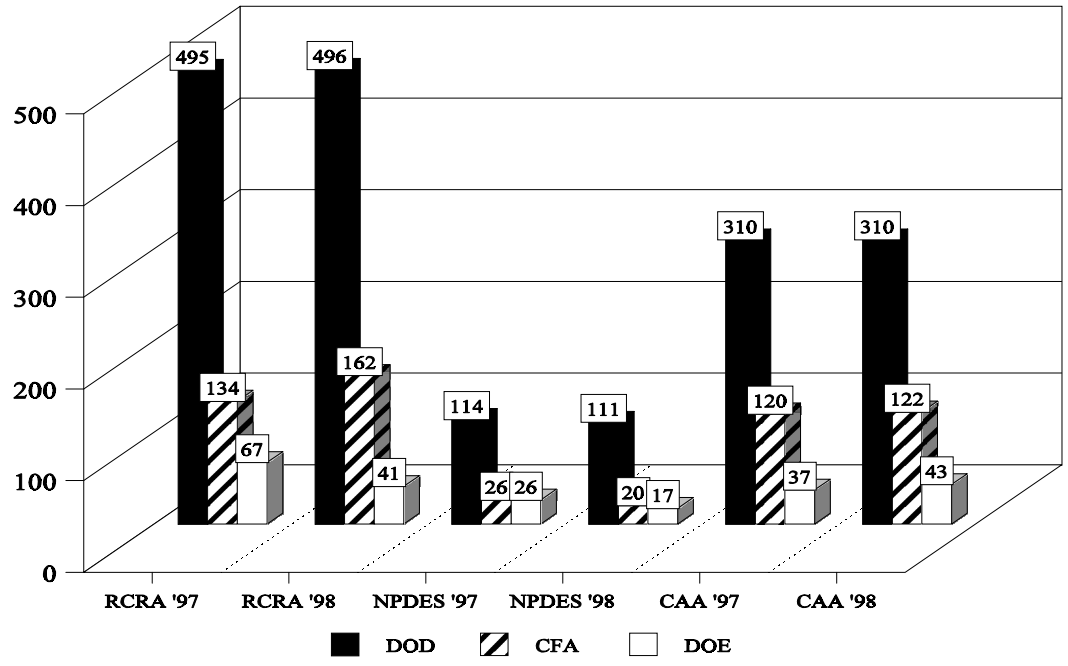
III. INSPECTIONS

EPA and states monitor activities at federal facilities to determine whether they are in compliance with environmental laws and regulations. Compliance monitoring also enables EPA to measure and track performance over time and to identify potential problem areas and compliance assistance opportunities. Most environmental programs rely on some form of facility inspection as the principal tool for determining compliance. The level of effort associated with these inspections varies, depending on the specific requirements addressed, the size and complexity of the facility's operations, and the type and amount of data required to assess compliance.

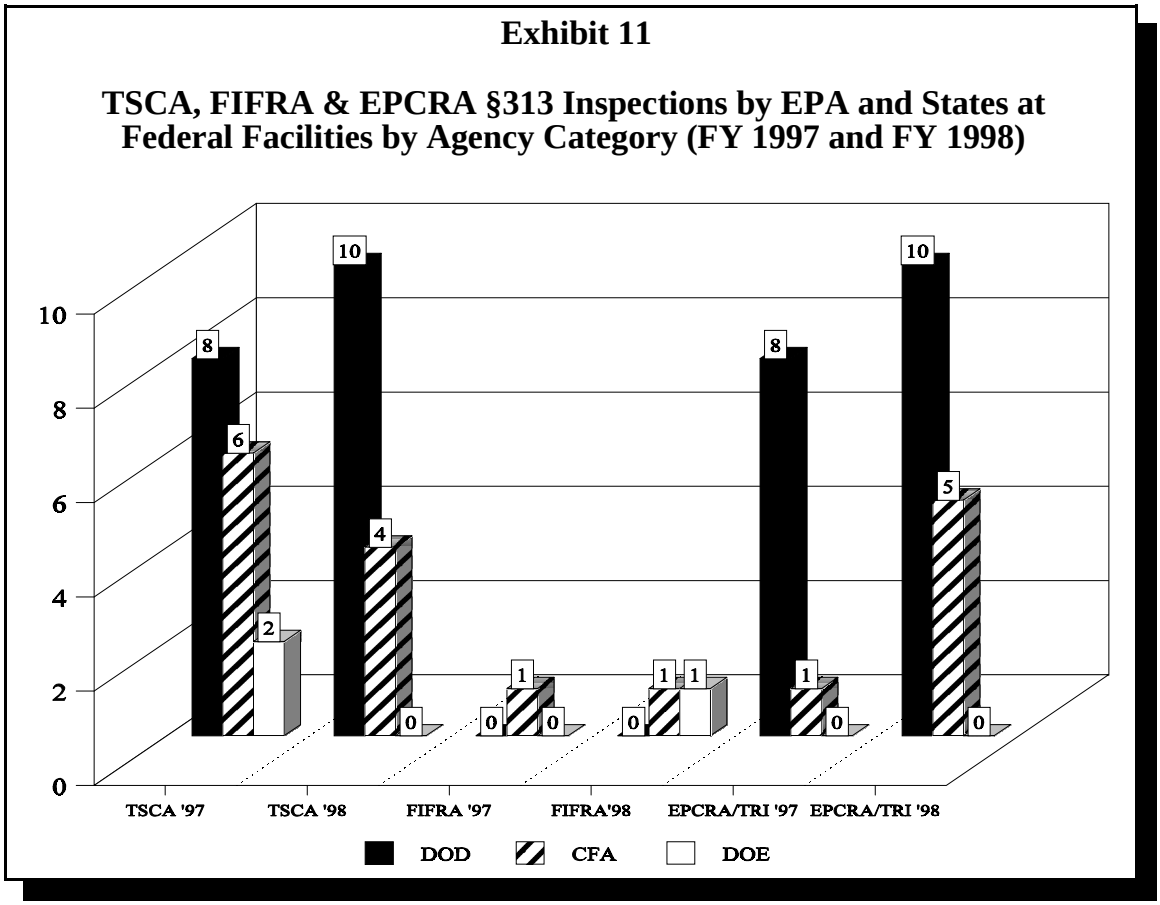
EPA and states conducted 1,395 RCRA, 314 NPDES, and 942 CAA inspections at federal facilities during FY 1997 and FY 1998. The number of inspections conducted under each of these statutes/programs remained fairly constant during both fiscal years (**Exhibit 10**). The number of SDWA/PWSS inspections is not reported in the federal SDWIS database and therefore is not presented in this report.

Exhibit 10

RCRA, NPDES & CAA Inspections by EPA and States at Federal Facilities by Agency Category (FY 1997 and FY 1998)



TSCA, FIFRA, and EPCRA §313 inspections at federal facilities were less common (**Exhibit 11**). There were 26 TSCA, FIFRA, and EPCRA §313 inspections in FY 1997 and 31 in FY 1998.



As shown in **Exhibits 10** and **11**, most inspections (69 percent and 69.3 percent in FY 1997 and FY 1998, respectively) occurred at DOD facilities. CFA inspections comprised 21.3 percent and 23.2 percent of the total, while DOE facilities received 9.7 percent and 7.5 percent, respectively. The total number of inspections in FY 1997 was 1,355 and in FY 1998 it was 1,353. **Exhibit 12** shows the total number of EPA and state inspections at federal facilities for RCRA, NPDES, CAA, and TSCA/FIFRA/EPCRA §313 since FY 1993.

RCRA Inspections

To assess compliance with RCRA requirements, EPA inspectors conducted 120 and 106 inspections at federal facilities in FY 1997 and FY 1998. The totals for state-led inspections were 576 and 593, for an overall total of 696 in FY 1997 and 699 in FY 1998 (**Exhibit 12**).

RCRA inspections range in intensity from comprehensive compliance evaluation inspections (CEI) to fairly basic record reviews. CEIs remain the most common form of RCRA

inspection, accounting for 65 and 69 percent of inspections at federal facilities during FY 1997 and FY 1998. Record reviews accounted for 12 to 14 percent of inspections. The remainder were composed of a variety of other inspection types (e.g., corrective action oversight, case development, compliance schedule, operations and maintenance).

CWA/NPDES Inspections

Implementation responsibility for the NPDES program lies primarily with the states. As a consequence, more than 85 percent of NPDES inspections conducted at federal facilities during FY 1997 and FY 1998 were led by states. In FY 1997, states performed 143 inspections versus 23 by EPA. In FY 1998, states performed 131 inspections versus 17 by EPA. Thus, the total number of inspections in FY 1997 was 166 and in FY 1998 it was 148 (**Exhibit 12**).

CAA Inspections

EPA and state inspectors conducted 467 CAA inspections of major federal sources during FY 1997 and 475 in FY 1998 (**Exhibit 12**). States continued to take a lead role on the majority of CAA inspections (444 state-led inspections versus 23 by EPA in FY 1997 and 467 state-led inspections versus eight by EPA in FY 1998).

SDWA/PWSS Inspections

The number of SDWA/PWSS inspections is not reported in the federal SDWIS database and therefore is not presented in this report.

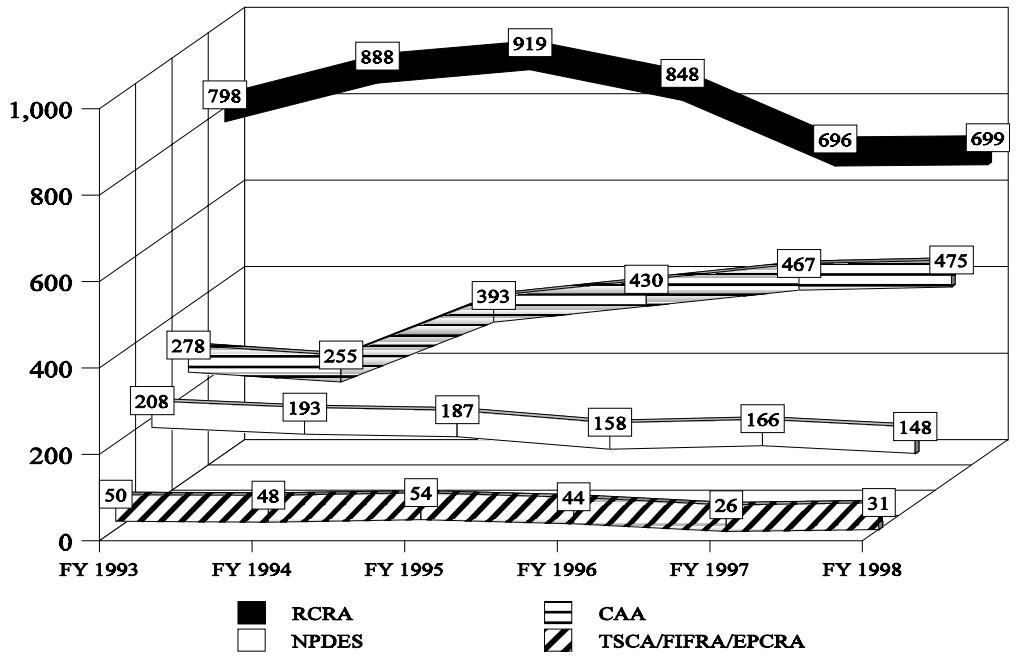
TSCA, FIFRA, and EPCRA §313 Inspections

The number of TSCA inspections conducted at federal facilities decreased from 16 in FY 1997 to 14 in FY 1998 (**Exhibit 11**). Most inspections (10 of 16 in FY 1997 and 11 of 14 in FY 1998) were led by EPA. The number of FIFRA inspections conducted at federal facilities remained very small; one inspection occurred during FY 1997, while two occurred during FY 1998 (**Exhibit 11**). All FIFRA inspections were led by EPA.

In addition to the standard reporting requirements of the EPCRA §313 (TRI program), EPA conducts a limited number of inspections at reporting federal facilities. Given the nature of the program, inspections conducted under EPCRA §313 tend to involve record reviews, although the process of verifying the accuracy of TRI reporting may involve some on-site field evaluations. During FY 1997 and FY 1998, there were nine and 15 EPCRA §313 inspections conducted at federal facilities (**Exhibit 11**). In accordance with Section 5-502 of Executive Order 12856, EPA Regions acted as the lead on all EPCRA §313 inspections. The total for TSCA, FIFRA, and EPCRA §313 inspections, shown in **Exhibit 12**, was 26 (six state-led) in FY 1997 and 31 (three state-led) in FY 1998.

Exhibit 12

EPA and State Inspections at Federal Facilities (FY 1993 - FY 1998)



Documentation for Exhibits in this Section

Exhibit Title	Information Source	Date of Data Pull	Comments
RCRA, NPDES & CAA Inspections by EPA and States at Federal Facilities by Agency Category	IDEA	Various	--
TSCA, FIFRA & EPCRA §313 Inspections by EPA and States at Federal Facilities by Agency Category	IDEA	Various	--
EPA and State Inspections at Federal Facilities (FY 1993 - FY 1998)	IDEA	Various	--

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IV. COMPLIANCE RATES

It is not feasible to develop a single measure of compliance for federal facilities for all environmental programs. However, evaluating narrowly defined compliance indicators over time can reveal how a sector of federal facilities is performing generally with respect to individual environmental programs.

Table 1 provides the definitions of selected compliance indicators used to calculate compliance rates. The reader should keep in mind that the compliance rates only apply to the universe of facilities within the definitions in **Table 1**. For example, the RCRA indicator and RCRA compliance rates only apply to inspected TSDFs. They should not be applied as a measure of compliance for uninspected TSDFs, non-TSDFs (e.g., generators), or other RCRA programs (e.g., underground storage tank program).

Table 1
Definitions of Compliance Indicators for Federal Facilities

Statute	Compliance Indicator
RCRA	Percent of inspected federal TSDFs not cited for Class I violations[4]
CWA	Percent of NPDES major federal facilities not in significant noncompliance (SNC)
CAA	Percent of major federal sources in compliance
SDWA	Percent of federal public water systems not in SNC
TSCA	Percent of inspected federal facilities not in SNC

Exhibit 13 presents compliance rates for five statutes based on the definitions of the indicators taken from **Table 1.** Pre-1997 rates were calculated in previous *State of Federal Facilities* reports. In this section, the rates are calculated for the federal sector as a whole (**Exhibit 13**) then calculated by federal agency category (i.e., DOD, DOE, and CFAs) for RCRA, CWA, and CAA. Compliance rates for the entire federal sector are also compared with the non-federal (i.e., private) sector for RCRA, CWA, and CAA.

Exhibit 13 shows that from FY 1993 to FY 1998, RCRA compliance increased, while CWA compliance exhibits a steady decline. SDWA compliance fluctuated but remained high (above 90 percent), as did CAA compliance (between 84 and 90 percent). After a low in FY 1994, TSCA compliance rebounded and has remained at 100 percent for the past four years.

[4] Beginning in FY 1998, the Violation Class field in RCRIS is no longer required. The field has not been removed from the RCRIS database and it may continue to be populated with new data. Subsequent *State of Federal Facilities* reports will rely on a different RCRA compliance indicator.

Exhibit 13

Federal Facility Compliance Rates for Selected Indicators

Statute	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
RCRA	55.4%	61.6%	73.8%	75.1%	81.2%	88.2%
CWA	94.2%	88.5%	76.2%	73.0%	70.4%	61.5%
CAA	87.0%	87.9%	88.8%	87.4%	84.2%	88.9%
SDWA	99.2%	98.7%	93.0%	96.4%	97.1%	98.1%
TSCA	93.5%	87.5%	100%	100%	100%	100%

Note: These rates reflect compliance only for the universe of facilities defined by the indicators in **Table 1** on page 23. For example, the RCRA rates apply only to inspected TSDFs. They do not apply to non-TSDFs (e.g., generators), uninspected TSDFs, or other RCRA programs (e.g., underground storage tanks).

RCRA Compliance Rates

In FY 1997 and FY 1998, 213 and 221 inspected federal facilities were TSDFs, which are generally considered "major" facilities under RCRA. Of these, 40 (18.8 percent) and 26 (11.8 percent) were cited for Class I violations. Therefore, 81.2 percent and 88.2 percent were not cited for Class I violations in FY 1997 and FY 1998. The corresponding compliance rates for the non-federal universe of inspected TSDFs were 79.5 percent and 83.3 percent (**Exhibit 14)**.

Exhibit 14

Percentage of Inspected TSDFs not Cited for RCRA Class I Violations (Federal vs. Non-Federal TSDFs)

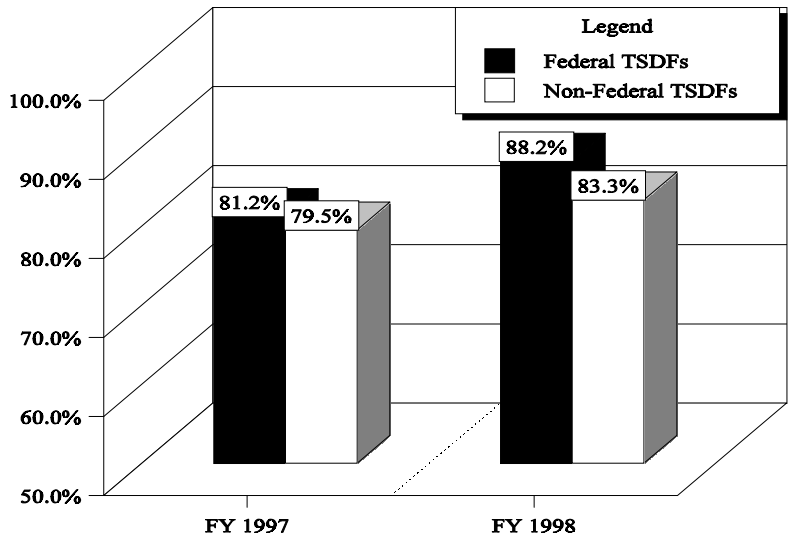


Exhibit 15 presents RCRA compliance rates according to federal agency category. Compliance rates at DOD facilities were 80.9 percent in FY 1997 and 87.5 percent in FY 1998. These rates were very close to the overall compliance rate for federal facilities. In FY 1997 and FY 1998, the CFA compliance rate was 100 percent. RCRA compliance rates at DOE facilities were lower (70.6 percent and 85 percent) than the overall federal facility rate for both years.

Exhibit 15
RCRA Compliance Rates by Federal Agency Category

Agency	FY 1997			FY 1998		
	Inspected TSDFs	TSDFs With Class I Violations	TSDFs Without Class I Violations	Inspected TSDFs	TSDFs With Class I Violations	TSDFs Without Class I Violations
DOD	183	35	148 (80.9%)	184	23	161 (87.5%)
CFAs	13	0	13 (100.0%)	17	0	17 (100.0%)
DOE	17	5	12 (70.6%)	20	3	17 (85.0%)
Total	213	40	173 (81.2%)	221	26	195 (88.2%)

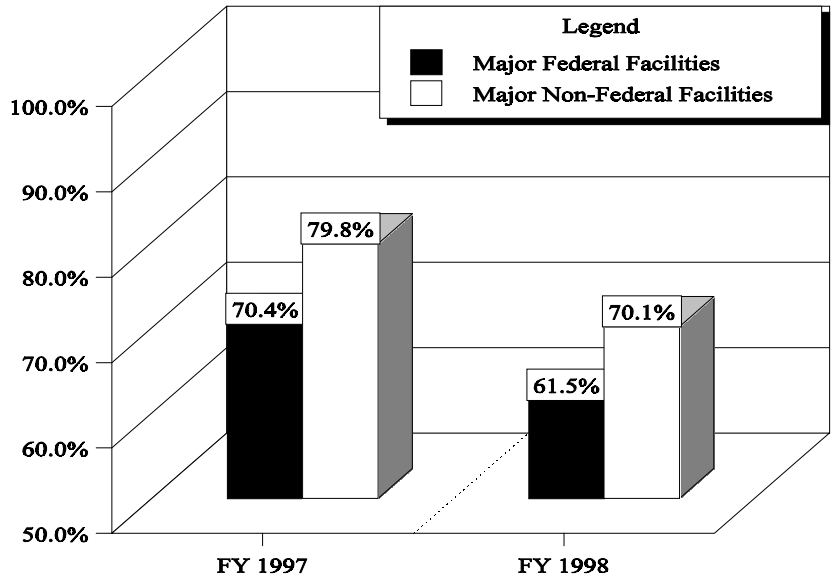
NPDES Compliance Rates

Under the CWA NPDES program, SNC is characterized by a violation of significant magnitude and/or duration to be considered among the EPA's priorities for review and/or response. The definition of SNC is EPA policy, which can change or evolve as the NPDES program changes. Beginning in FY 1998, the definition of SNC was expanded to encompass more categories of violations.

Exhibit 16 compares the percentage of major federal facilities not in SNC against the corresponding percentage for the universe of major non-federal NPDES facilities. In FY 1997, the percentage of major federal facilities not in SNC was 70.4 percent, roughly 10 percent lower than for major non-federal facilities. In FY 1998, compliance rates for all major facilities declined, though major federal facilities still experienced lower compliance rates compared to the non-federal universe (61.5 percent versus 70.1 percent).

Exhibit 16

Percentage of Major NPDES Facilities not in SNC (Federal vs. Non-Federal Majors)



The number of major federal facilities determined to be in SNC increased from 37 in FY 1997 to 45 in FY 1998. **Exhibit 17** presents NPDES compliance rates by agency category for FY 1997 and FY 1998. For both years, DOD facilities were slightly below (68.2 percent in FY 1997 and 58.2 percent in FY 1998) the overall compliance rate for federal facilities. For both years, CFA facilities had the highest compliance rates when compared to overall rates. DOE had the lowest compliance rate relative to the CFAs and DOD, as well as the overall compliance rate.

Exhibit 17
NPDES Compliance Rates by Federal Agency Category

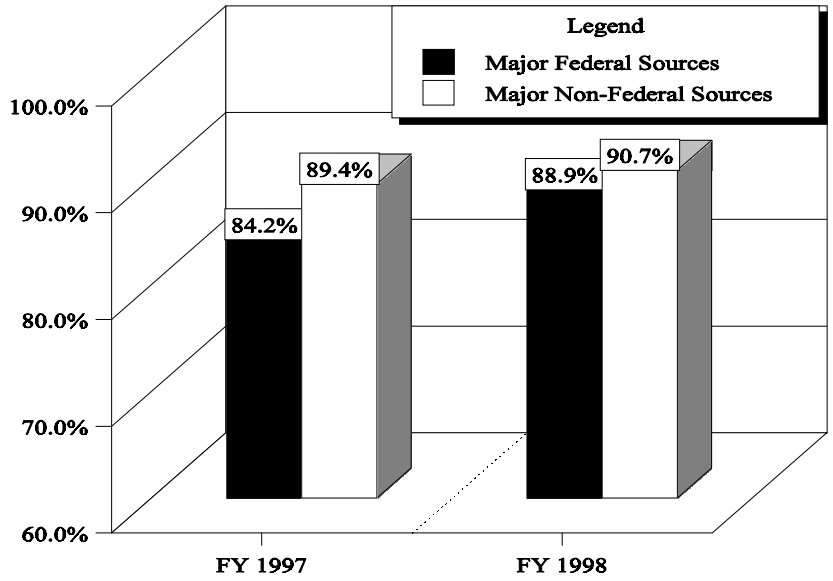
	FY 1997			FY 1998		
Agency	**Major Facilities**	**SNC**	**Not in SNC**	**Major Facilities**	**SNC**	**Not in SNC**
DOD	85	27	58 (68.2%)	79	33	46 (58.2%)
CFAs	26	4	22 (84.6%)	24	6	18 (75.0%)
DOE	14	6	8 (57.1%)	14	6	8 (57.1%)
Total	125	37	88 (70.4%)	117	45	72 (61.5%)

CAA Compliance Rates

Under the CAA programs, sources that have exceeded emissions standards and/or violated procedural requirements (e.g., failed to meet a compliance schedule, or failed to follow monitoring, recordkeeping and reporting protocols) are deemed out of compliance. As shown in **Exhibit 18**, during FY 1997 and FY 1998, federal sources experienced lower compliance rates (84.2 percent and 88.9 percent) than the rest of the regulated community. CAA compliance rates for the same two years for major non-federal sources were 89.4 and 90.7 percent, respectively.

Exhibit 18

Percentage of CAA Major Sources in Compliance (Federal vs Non-Federal Sources)



As shown in **Exhibit 19**, DOD compliance rates were higher than both DOE and CFA compliance rates; although the improvement in compliance rates over the two year period was more pronounced among CFA and DOE sources.

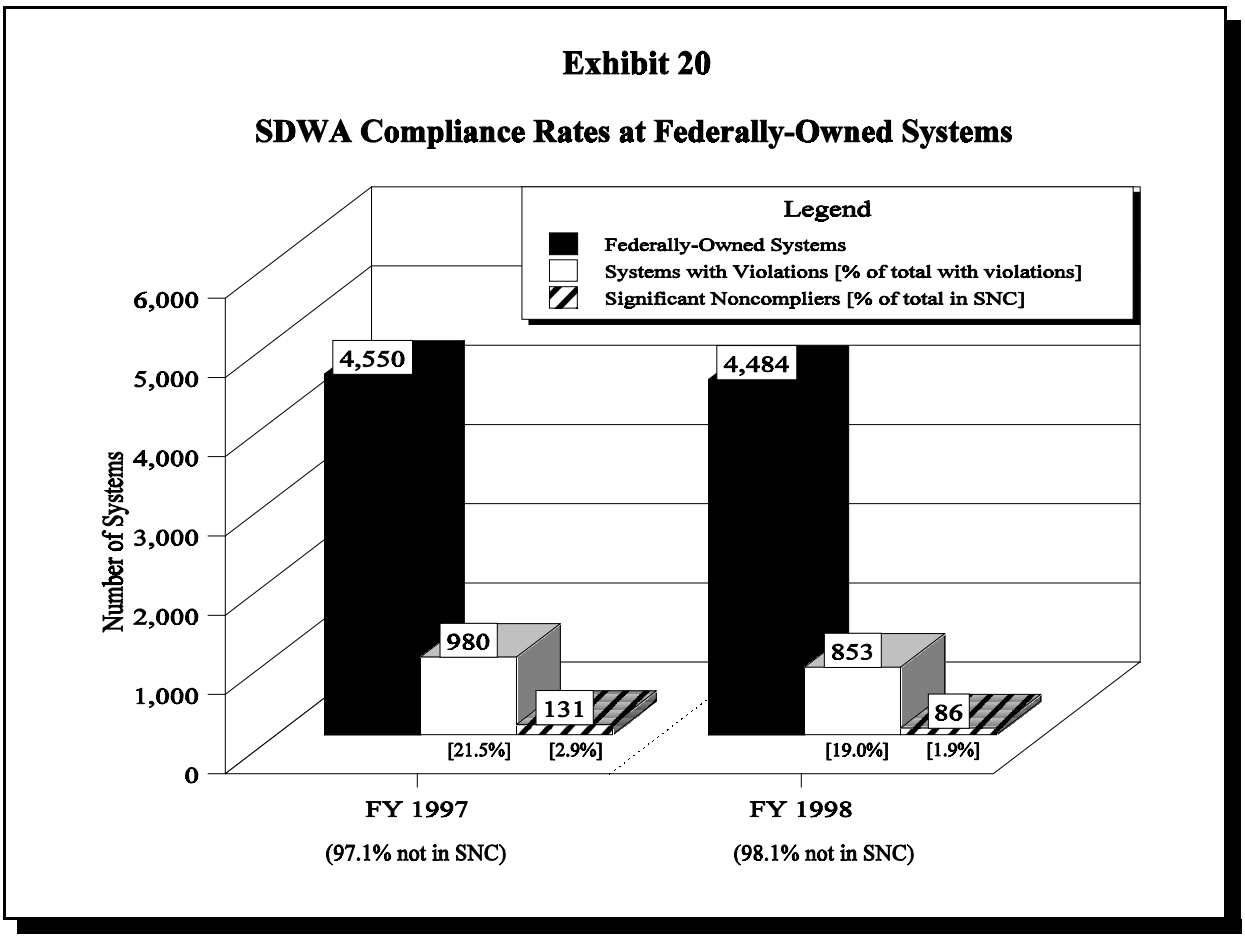
Exhibit 19
CAA Compliance Rates by Federal Agency Category

Agency	FY 1997			FY 1998		
	Major Sources	Majors Out of Compliance	Majors In Compliance*	Major Sources	Majors Out of Compliance	Majors In Compliance*
DOD	282	25	251 (89.0%)	279	20	254 (91.0%)
CFAs	148	27	114 (77.0%)	163	14	139 (85.3%)
DOE	44	3	34 (77.3%)	36	3	32 (88.9%)
Total	474	55	399 (84.2%)	478	37	425 (88.9%)

* In FY 1997, there were 20 sources (six DOD, seven CFA, and seven DOE) that were of unknown compliance status. In FY 1998, there were 16 such sources (five DOD, 10 CFA, and one DOE). These sources were not included in the compliance rate calculation.

SDWA Compliance Rates

Under the SDWA/PWSS programs, water systems in SNC have more serious, frequent, or persistent violations. **Exhibit 20** shows the number of federally-owned public water systems cited for violations under SDWA, as well as the number of systems classified as SNC for more serious violations. The number of systems cited for violations decreased from 980 in FY 1997 to 853 in FY 1998. SNC systems exhibited a similar decline, from 2.9 percent in FY 1997 to 1.9 percent in FY 1998. The compliance indicator used for the SDWA is the percentage of PWSS systems not in SNC. Therefore, as shown below, the compliance rate for federal systems overall increased from 97.1 percent in FY 1997 to 98.1 percent in FY 1998. It was not possible to provide a compliance rate for individual agency categories of CFAs, DOD, and DOE.



TSCA Compliance Rates

EPA and the states did not find any inspected federal facilities to be in SNC with TSCA during FY 1997 or FY 1998. In other words, there were no violations of TSCA at federal facilities that triggered an enforcement response at an administrative complaint level. Therefore the compliance indicator, defined as the percentage of inspected federal facilities not in SNC, was 100 percent for FY 1997 and FY 1998 (**Exhibit 21**). In fact, TSCA compliance at federal facilities has remained at 100 percent since FY 1995.

Exhibit 21 also presents compliance rates for inspected federal facilities under FIFRA and EPCRA §313. For FY 1997 and FY 1998, the compliance rates for federal facilities under both programs were 100 percent. However, the number of FIFRA inspections at federal facilities has historically been low, and the number of EPCRA §313 inspections at federal facilities has only recently approached the number of TSCA inspections.

Exhibit 21
TSCA, FIFRA & EPCRA §313 Compliance Rates

Statute	FY 1997		FY 1998	
	Inspected Facilities	Facilities not in SNC	Inspected Facilities	Facilities not in SNC
TSCA	16	16	14	14
FIFRA	1	1	2	2
EPCRA	9	9	15	15
Total	26	26 (100%)	31	31 (100%)

Documentation for Exhibits in this Section

Exhibit Title	Information Source	Date of Data Pull	Comments
Federal Facility Compliance Rates for Selected Indicators	IDEA	Various	--
Percentage of Inspected TSDFs not Cited for RCRA Class I Violations	IDEA	2/26/98 3/31/99	--
RCRA Compliance Rates by Federal Agency Category	IDEA	2/26/98 3/31/99	--
Percentage of Major NPDES Facilities not in SNC	IDEA	3/20/98 3/4/99	--
NPDES Compliance Rates by Federal Agency Category	IDEA	3/20/98 3/4/99	--
Percentage of CAA Major Sources in Compliance	IDEA	2/12/98 3/1/99	--
CAA Compliance Rates by Federal Agency Category	IDEA	2/12/98 3/1/99	--
SDWA Compliance Rates at Federally-Owned Systems	SDWIS	7/8/99	--
TSCA, FIFRA and EPCRA §313 Compliance Rates	IDEA	2/17/98 3/9/99	--

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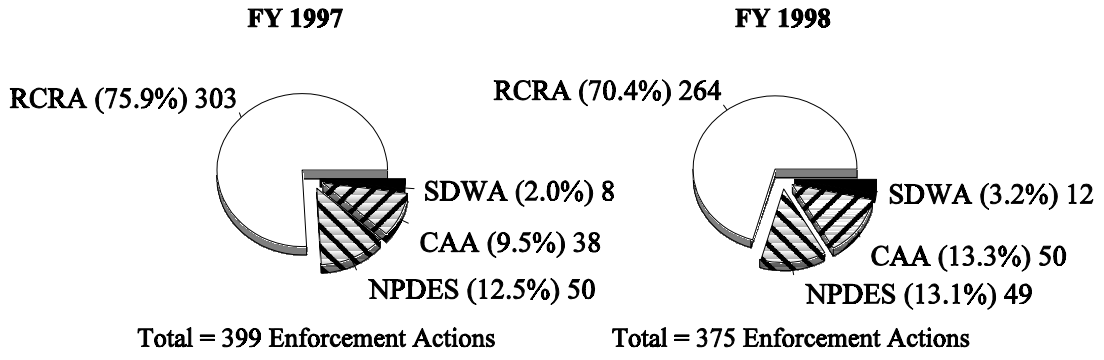
V. ENFORCEMENT ACTIONS

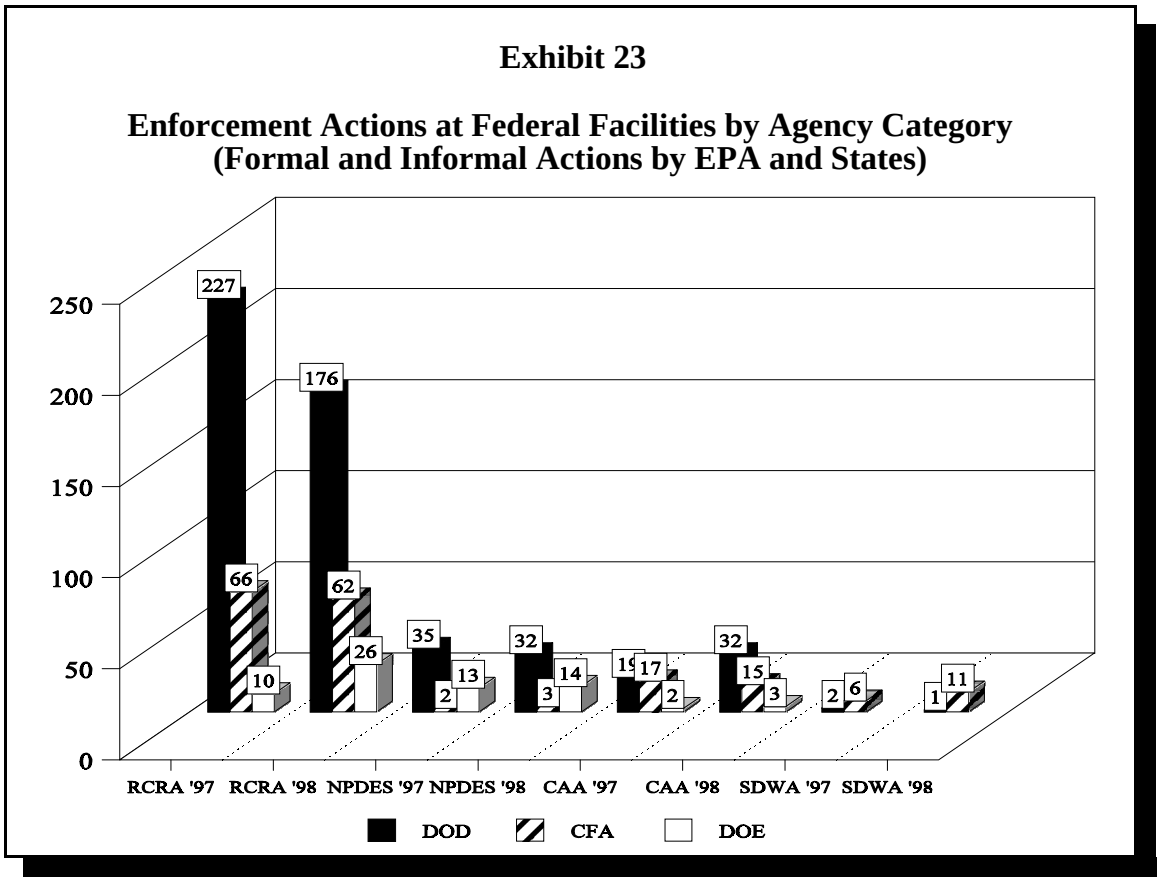
EPA and states issued 399 and 375 enforcement actions against federal facilities in FY 1997 and FY 1998, respectively. **Exhibit 22** presents these enforcement actions by statute/environmental program. RCRA enforcement actions comprised more than 70 percent of all enforcement actions at federal facilities, while NPDES and CAA actions accounted for roughly equivalent shares of the remaining 25 to 30 percent. SDWA actions accounted for two to three percent of actions. There were no enforcement actions taken at federal facilities under TSCA, FIFRA, or EPCRA §313.

Exhibit 22

Enforcement Actions at Federal Agencies by Statute (Formal and Informal Actions by EPA and States)



As shown in **Exhibit 23**, DOD facilities received the largest share of enforcement actions under all statutes except for SDWA. For RCRA in particular, the number of actions taken against DOD facilities outnumbered those for the next highest agency category (CFAs) by a three to one margin. Between FY 1997 and FY 1998, DOE's share of enforcement actions nearly doubled – from 25 to 43 actions (6.3 percent to 11.5 percent), while DOD's declined from 283 to 241 actions (70.9 percent to 64.3 percent). Over the same period, CFAs' share increased from 22.8 percent to 24.3 percent (91 actions in FY 1997 and FY 1998).



RCRA Enforcement

For RCRA, the percentage of state-led actions remained fairly constant; 242 of 303 (79.9 percent) in FY 1997 and 222 of 264 (84.1 percent) in FY 1998. As shown in **Exhibit 24**, for FY 1997 and FY 1998, more than 80 percent of RCRA enforcement actions taken against federal facilities were informal (e.g., warning letters, verbal warnings). Formal actions include: civil actions, consent decrees, federal facility compliance agreements (FFCAs), referrals to other enforcement authorities, judicial orders, notices of noncompliance, administrative orders, corrective action orders, and imminent hazard orders. The most commonly used formal enforcement action is the RCRA §3008(a) administrative order; approximately 79 percent (42 out of 53) and 68 percent (27 out of 40) of formal enforcement actions taken in FY 1997 and FY 1998, respectively, were administrative orders.

Proposed RCRA penalties increased nearly fourfold from just over $400,000 in FY 1997 to almost $1.6 million in FY 1998. Despite this increase, however, final penalties actually decreased by more than 20 percent, from roughly $161,000 to $126,000 over the same period. In addition, final supplemental environmental project (SEP) costs under RCRA declined from $48,000 to slightly more than $26,000.

Exhibit 24
RCRA Enforcement Actions at Federal Facilities

Type of Action	FY 1997 Total	FY 1998 Total
Informal	250 (82.5%)	224 (84.8%)
Formal	53 (17.5%)	40 (15.2%)
All Enforcement Actions	**303**	**264**
Proposed Penalties	$438,925	$1,597,515
Final SEP Cost	$48,000	$26,251
Final Penalties Collected (excluding SEP costs)	$160,987	$125,882

NPDES Enforcement Actions

The number of enforcement actions taken to address NPDES noncompliance at federal facilities remained constant during FY 1997 and FY 1998; however, the types of actions changed. As shown in **Exhibit 25**, the share of informal enforcement actions (e.g., phone calls, warning letters, informal NOVs) decreased from FY 1997 to FY 1998, while the percentage of formal actions (i.e., FFCAs, administrative orders, and formal NOVs) exhibited a modest decrease. The percentage of other enforcement actions (e.g., unspecified pending actions and referrals) increased from eight percent in FY 1997 to more than 40 percent in FY 1998. State-led NPDES actions accounted for 62 percent (31 of 50) and 71.4 percent (35 of 49) for FY 1997 and FY 1998, respectively.

Exhibit 25
NPDES Enforcement Actions at Federal Facilities

Type of Enforcement Action	Number of Actions in FY 1997	Number of Actions in FY 1998
Informal	37 (74.0%)	22 (44.9%)
Formal	9 (18.0%)	7 (14.3%)
Other	4 (8.0%)	20 (40.8%)
TOTAL	**50**	**49**

CAA Enforcement

EPA and states issued 38 and 50 NOVs and orders at federal sources during FY 1997 and FY 1998, respectively, for failure to comply with provisions of the CAA. The majority of these actions were NOVs (**Exhibit 26**). States took the lead on 100 percent (38 of 38) and 96 percent (48 of 50) of these enforcement actions. The majority of these enforcement actions were issued against DOD sources (50 percent and 64 percent in FY 1997 and FY 1998, respectively), although CFA sources also received a substantial share (44.7 percent and 30 percent). DOE sources received between 5 and 6 percent of actions during both FY 1997 and FY 1998.

Exhibit 26
CAA Enforcement Actions at Federal Facilities

Type of Enforcement Action	Number of Actions in FY 1997	Number of Actions in FY 1998
EPA Orders	--	1 (2.0%)
State Orders	7 (18.4%)	13 (26.0%)
EPA NOVs	--	1 (2.0%)
State NOVs	31 (81.6%)	35 (70.0%)
TOTAL	38	50

SDWA/PWSS Program Enforcement

Relatively few federally-owned systems received formal enforcement actions for violations under the PWSS program, either from EPA or the states. **Exhibit 27** shows that the total number of federal systems receiving formal enforcement actions increased from eight in FY 1997 to 12 in FY 1998. States took the lead on nearly 90 percent of SDWA actions (seven of eight) during FY 1997 and 33 percent (four of 12) during FY 1998.

Exhibit 27
SDWA Enforcement Actions at Federal Facilities

Type of Enforcement Action	Number of Actions in FY 1997	Number of Actions in FY 1998
EPA Orders	1 (12.5%)	8 (66.7%)
State Orders	4 (50.0%)	2 (16.7%)
State Bilateral Compliance Agreements	3 (37.5%)	2 (16.7%)
TOTAL	**8**	**12**

EPA formal actions include administrative orders and §1431 emergency orders, while state formal actions include administrative orders, bilateral compliance agreements, civil referrals, and criminal cases filed. Of the seven formal enforcement actions issued by states in FY 1997, three were bilateral compliance agreements and four were administrative orders, while the EPA formal enforcement action was an administrative order. In FY 1998, of the 12 formal enforcement actions issued, eight were federal administrative orders and the remaining four were split evenly between state bilateral compliance agreements and administrative orders. No federally-owned systems received civil referrals or had criminal cases filed against them during either year.

TSCA, FIFRA, and EPCRA §313 Enforcement

There were no violations at inspected federal facilities of TSCA, FIFRA, or EPCRA §313 that triggered an enforcement response at an administrative complaint level.

Documentation for Exhibits in this Section

Exhibit Title	Information Source	Date of Data Pull	Comments
Enforcement Actions at Federal Agencies by Statute	IDEA	Various	--
Enforcement Actions at Federal Facilities by Agency Category	IDEA	Various	--
RCRA Enforcement Actions at Federal Facilities	IDEA	2/17/98 3/31/99	--
NPDES Enforcement Actions at Federal Facilities	IDEA	2/13/98 3/4/99	--
CAA Enforcement Actions at Federal Facilities	IDEA	2/20/98 2/25/99	--
SDWA Enforcement Actions at Federal Facilities	SDWIS	7/7/99	--