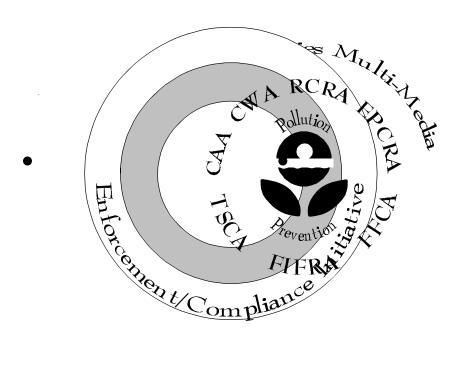


Federal Facilities Multi-Media Enforcement/Compliance Initiative

Final National Report

December 1995



Office of Enforcement and Compliance Assurance Federal Facilities Enforcement Office Logial Facilities Multi-

Executive Summary

This is the Final National Report on the FY 1993-94 Federal Facilities Multi-Media Enforcement/Compliance Initiative (FMECI). An Interim National Report was published in November of 1994. The FMECI was designed to assess the compliance status of Federal facilities with environmental laws using a multi-media approach. EPA established the FMECI as a priority for FY 1993-1994, recognizing that Federal facilities are a highly visible sector of the regulated community and have historically demonstrated lower rates of compliance with environmental laws than their private sector counterparts. It also provided EPA an opportunity

FMECI FY 1993-1994 HIGHLIGHTS

- The 73 FMECI inspections in FY 1993-1994 represent a significant investment in the Federal facility sector by EPA and participating States.
- On average, Regions evaluated compliance with five environmental statutes/ programs during each inspection. Thus, the 73 multi-media inspections conducted during the FMECI would be equivalent to 365 single-media inspections.
- Approximately 75 percent (55 of 73) of the inspected facilities received a total of 119 EPA or State enforcement actions for violations under nine separate environmental statutes.
- Of the facilities receiving enforcement actions, 60 percent (33 of 55) violated more than one statute.
- More than 45 percent (33 of 73) of all inspected facilities violated two or more statutes.
- EPA documented significant levels of State involvement in the FMECI. States led 23 percent of inspections and participated in an additional 59 percent of inspections.
- EPA's procedures and approach to conducting multi-media inspections can be effective, regardless of the size or operating agency of the facilities involved.
- EPA Regions proposed a total of more than \$3.7 million in penalties.
- EPA and States encouraged facilities to adopt pollution prevention strategies as first-choice measures to return to and maintain compliance.

to pilot multi-media compliance and enforcement approaches within one sector of the regulated community -- Federal facilities. Although the initiative has ended, multi-media inspection and enforcement activities at Federal Facilities have now been integrated into all EPA Regional enforcement programs.

BACKGROUND

The goals of the FMECI were to:

- Foster improved Federal agency compliance with and awareness of environmental laws and regulations;
- Help reduce environmental risks posed by Federal facilities through a multi-media inspection and enforcement approach;
- Achieve a more efficient use of enforcement authorities and resources; and
- Expand the application of pollution prevention approaches to compliance problems so that facilities can exceed baseline compliance.

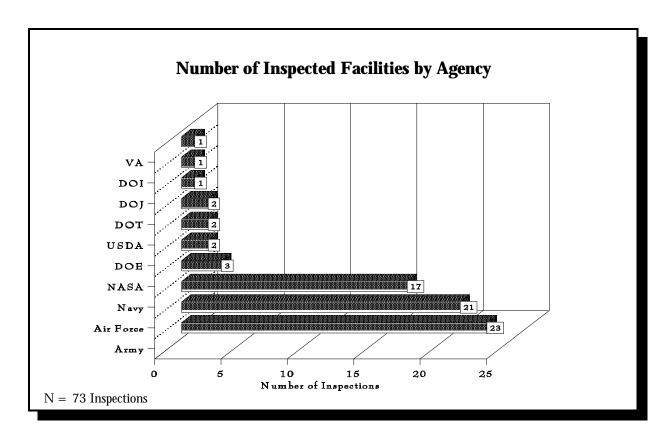
This Report examines five key areas of the FMECI:

- Compliance and enforcement results;
- Pollution Prevention efforts:
- Administration, protocol, and resources used in carrying out multi-media inspections;
- Regional/State coordination levels; and
- Overall impacts of the multi-media inspection approach.

The remainder of this executive summary presents the key findings of the FMECI Report. Additional details on the type, size, and location of facilities inspected; types of enforcement actions taken and size of penalties; pollution prevention conditions and supplemental environmental projects undertaken as part of enforcement action; and the level of Federal/State interaction during the FMECI are contained in the national summary. The Report also contains detailed Regional descriptions of the program.

MULTI-MEDIA INSPECTIONS

EPA Regions and participating States conducted 73 multi-media compliance inspections during the FMECI; 41 in FY 1993 and 32 in FY 1994. The number of inspections conducted ranged from three in Region V to 21 in Region IV. Most Regions conducted fewer inspections during the second year of the initiative, although Region IX increased its inspection activity from two in FY 1993 to five in FY 1994.

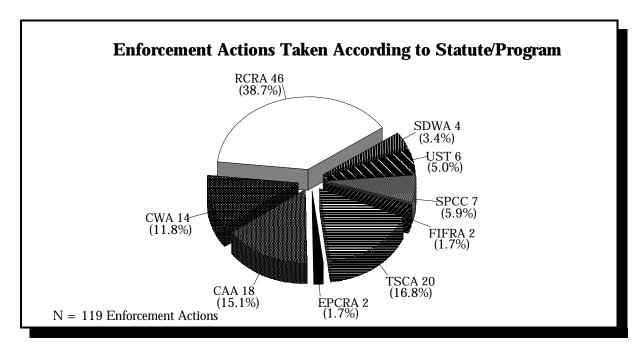


Almost 84 percent (61 of 73) of the inspections were conducted at DOD facilities. The remaining multi-media inspections consisted of two DOE installations and 10 Civilian Federal Agency (CFA) facilities.

States assumed a lead role on 23 percent (17 of 73) of inspections conducted under the FMECI. EPA-only inspections accounted for 18 percent (13 of 73), while EPA-lead inspections, which include collaborations between the States and the Regions or the National Enforcement Investigations Center (NEIC), accounted for the remaining 59 percent (43 of 73).

MULTI-MEDIA ENFORCEMENT ACTIONS

A total of 119 enforcement actions were taken under nine different statutes. The four most frequently violated statutes (RCRA, TSCA, CAA, & CWA) accounted for almost 83 percent of all violations.



More than 75 percent (55 of 73) of all inspected facilities violated at least one statute, and more than 45 percent (33 of 73) of all inspected facilities violated two or more statutes. Among the inspected facilities receiving enforcement actions under the FMECI, the median number of environmental statutes violated was two.

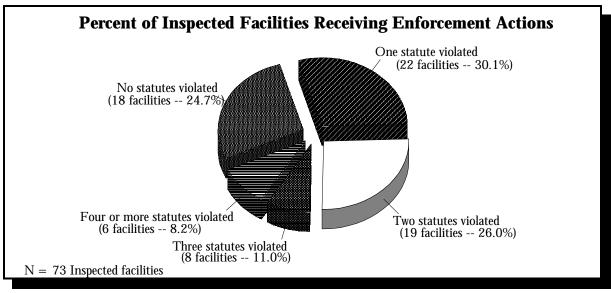


Figure 3

POLLUTION PREVENTION

Regions actively pursued pollution prevention remedies as a compliance tool during the FMECI. Most Regions noted the importance of pollution prevention and the expectation that it would become more prominent in the future. Federal facilities in five Regions have either implemented pollution prevention Supplemental Environmental Projects (SEPs) or at least explored their feasibility. In addition, three of these five Regions have included pollution prevention remedies and conditions into enforcement settlements.

Six Regions provided Pollution Prevention Opportunity Profiles to Federal facilities at the time of the inspections. The Profiles identify processes, measures, operations and maintenance practices, and technologies that facilities can explore to reduce or prevent the release of pollutants.

Several other Regions reported pursuing less formal pollution prevention strategies at inspected facilities. At least two Regions made specific pollution prevention recommendations that were later adopted by facilities, while another Region noted that immediately following a multi-media inspection, the facility initiated several pollution prevention measures.

OVERALL IMPACT OF THE FMECI

Six of nine Regions responding to a survey stated that the FMECI resulted in increased interest in using multi-media inspections, although one region commented that it could allocate necessary resources for only a small number of inspections. The Regions viewed the inspections as an effective enforcement tool that expands the knowledge of inspectors. Relative to conventional single-media inspections, two Regions reported that multi-media inspections are more efficient, however, two other Regions noted just the opposite.

Overall, the Regions perceived facilities involved in multi-media inspections to be professional, cooperative, and positive in responding to the FMECI. Regions also noted that facility environmental staff often welcomed the inspections because the attention inspections brought to environmental management reinforced the importance of their efforts. Three Regions mentioned the effectiveness of the FMECI in involving upper management staff at facilities and one Region noted the responsiveness of base commanders, stating that commanders frequently will send follow-up letters outlining the corrections made as a result of inspections.

Regions also described some of their concerns that arose during the FMECI. These ranged from potential difficulties incorporating multi-media inspections as a standard Regional program element once the FMECI concludes, to concerns on the part of facility personnel about criminal liability associated with environmental violations discovered during inspections, and the effect these concerns could have on facility participation. The remainder of this report presents a National Summary of the FMECI and detailed Region-by-Region results.

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Acronyms

<u>Acronym</u>	<u>Definition</u>
AFB	Air Force Base
ANL	Argonne National Laboratory
AO	Administrative Order
CAA	Clean Air Act
CAFO	Compliance Agreement Final Order
CFA	Civilian Federal Agency (i.e., all Federal agencies except DOE and DOD)
CWA	Clean Water Act
DOD	Department of Defense
DOE	Department of Energy
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FFC	Federal Facility Coordinator
FFCA	Federal Facility Compliance Agreement/Act
FFEO	Federal Facilities Enforcement Office
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FMECI	Federal Facilities Multi-Media Enforcement/Compliance Initiative
NEIC	National Enforcement Investigations Center
NON	Notice of Noncompliance
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
OCE	Office of Criminal Enforcement
OECA	Office of Enforcement and Compliance Assurance
RCRA	Resource Conservation and Recovery Act
RREL	Risk Reduction Engineering Laboratory
SDWA	Safe Drinking Water Act
SEA	State Enforcement Agreements
SEP	Supplemental Environmental Projects
SPCC	Spill Prevention Control and Countermeasures
TSCA	Toxic Substances Control Act
UIC	Underground Injection Control
UST	Underground Storage Tank

Definitions

The following are definitions of key terms used within this report. They are intended to facilitate a greater understanding of the multi-media compliance and enforcement program at Federal facilities. They do not represent "official" agency definitions.

Enforcement Actions are administrative responses taken to address violations of environmental regulations. Enforcement actions include informal responses, formal administrative responses, and civil judicial responses. Informal responses, such as Notices of Violation (NOVs), Notices of Noncompliance (NONs), and Warning Letters, are advisory in nature. They inform the manager of a facility what violation was found, what corrective action should be taken, and by what date. Informal responses carry no penalty or power to compel actions, but if ignored, they can lead to more severe actions. Formal administrative responses, such as Administrative Orders, may require the recipient to take some corrective or remedial action within a specified period of time, to refrain from certain behavior, or to require future compliance. Civil judicial responses against non-Federal sector facilities are lawsuits brought in U.S. Federal Court by the Department of Justice at EPA's request. They force more serious or recalcitrant violators of environmental laws to take corrective action to address the violation and prevent future violations. Both formal and civil judicial responses may involve monetary penalties.

Facility Size is classified as either small, medium, or large. A small facility has a minimal number of units, sources, systems, activities, or sites subject to environmental regulations. A medium-sized facility has multiple regulated units, etc. of varying levels of complexity (e.g., Langley Air Force Base, Fort Gordon). A large facility has many and/or complex regulated units, etc. (e.g., Aberdeen Proving Ground, DOE Hanford).

Inspection Categories are different types of environmental compliance inspections conducted at Federal facilities. Category A is a single media inspection. Category B is a single media inspection during which inspectors screen for other program areas. Category C is a coordinated inspection of several program areas. Category D is a consolidated facility inspection that uses a team representing each of the various media programs.

<u>Single-Media vs. Multi-Media</u> Single-media inspections examine a facility's compliance with one environmental statute or program. The term "single-media" is used because environmental statutes and programs frequently address potential threats to a single environmental medium, as with the CAA and the CWA, which regulate potential air and water pollution, respectively. Inspections under other statutes, such as TSCA, FIFRA, and RCRA, although they may involve potential threats to multiple environmental media, are nonetheless considered single-media because they are carried out under a single-statute. The term "multi-media" is used because multi-media inspections invariably examine potential threats to multiple environmental media.

Statute vs. Program Environmental statutes are laws governing a broad topic of environmental concern (e.g., RCRA). Programs represent more focused aspects within a particular statute (e.g., the UST program under RCRA).
<u>Supplemental Environmental Projects</u> or SEPs are environmentally beneficial projects that a violator agrees to undertake in settlement of an enforcement action, but which the violator is not otherwise legally required to perform.

Introduction

This report presents the national and Regional results of the U.S. Environmental Protection Agency (EPA) Federal Facility Multi-Media Enforcement/Compliance Initiative (FMECI). EPA established FMECI as an Agency priority for FY 1993 and FY 1994 in recognition of the fact that Federal facilities are highly visible and have a mandate and commitment to address environmental problems in the Federal sector. Traditionally, however, Federal facilities have demonstrated lower rates of compliance with environmental laws than have private sector facilities.

BACKGROUND

The FMECI was a national initiative designed to assess compliance of Federal facilities with environmental laws using multi-media inspections and enforcement to address areas of noncompliance. The initiative consisted of a series of coordinated multi-media team inspections conducted by all ten EPA Regional Offices, in concert with appropriate State officials, at Federal facilities throughout the nation. An Interim National Report on the results of the FMECI, based on FY 1993 data, was published in November of 1994 (EPA 300-R-94-007).

OBJECTIVES

In the past few years, EPA and Federal facilities have stepped up efforts to ensure that environmental compliance is thorough, expedient, and just. Pursuant to those goals, and underscored by the Federal Facilities Compliance Act of 1992, the FMECI seeks to:

- Foster improved Federal agency compliance with environmental laws and regulations;
- Help reduce environmental risks posed by Federal facilities by increasing the use of multi-media inspections;
- Achieve efficient use of enforcement authorities by consolidating efforts; and
- Expand the application of pollution prevention measures so that facilities can exceed baseline compliance.

The next section explains EPA's approach to the design and implementation of the FMECI.

GUIDANCE/TARGETING CRITERIA

EPA Regions performed their field activities in accordance with the FY 1993-1994 FMECI Implementation Guidance Document prepared by the Federal Facilities Enforcement Office (FFEO) of the Office of Enforcement and Compliance Assurance (OECA). The

guidance specified that each Region conduct at least two multi-media inspections during each year of the FMECI. The guidance also provided a set of criteria for the Regions to use in targeting inspections of Federal facilities. The criteria were designed to be adjusted by the Regions to account for Region-specific factors. These criteria include:

- Compliance history;
- Regional Risk Ranking (including NEIC ranking or other identified impacts to human health and the environment);
- Other national, Regional, or State environmental priorities/initiatives;
- Environmental justice; and
- Opportunities for pollution prevention.

Once the facilities are selected, the EPA Regional Federal Facility Coordinator (FFC), inspectors from EPA, and State media-specific environmental protection programs form teams and conduct the inspections. The team concept is designed so that facilities can:

- Comprehensively evaluate environmental compliance performance;
- Take advantage of combined expertise to identify pollutants that affect various environmental media; and
- Identify pollution prevention opportunities.

In designing the FMECI, FFEO consulted with EPA Regions, EPA Headquarters Program Offices, and State organizations. EPA issued inter-agency communication to other Federal agencies to launch the initiative, which produced tools and achieved effects consistent with FMECI goals.

REGIONAL SURVEY

This report describes the national and Regional results of a survey that FFEO administered to the ten EPA Regions at the conclusion of the FMECI. The survey queried each Region regarding key facets of the FMECI, including:

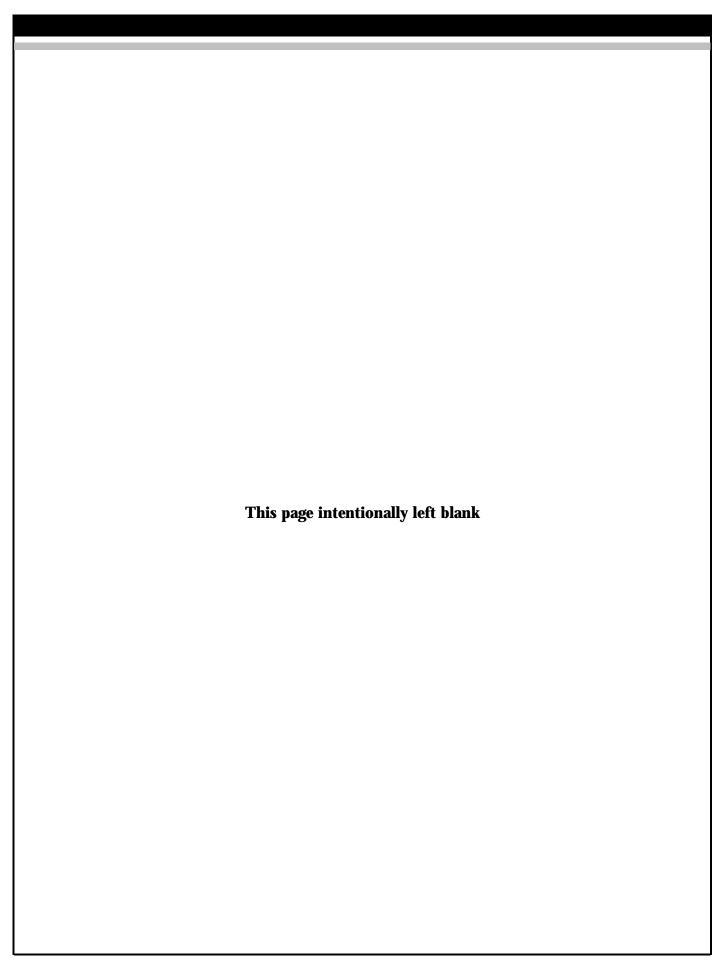
• **Compliance/Enforcement:** the number of multi-media enforcement inspections conducted in FY 1993 and FY 1994; type, number, and status of enforcement actions taken; amount of proposed and final penalties associated with particular enforcement actions; and State enforcement leads;

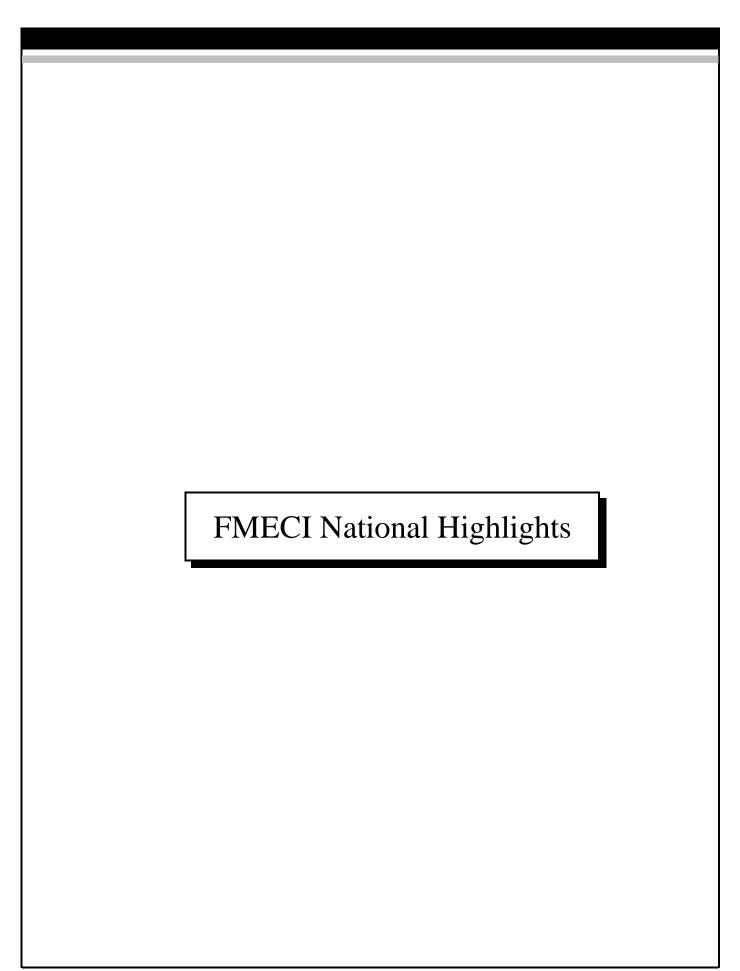
- **Pollution Prevention:** the degree to which the inspected facilities used pollution prevention measure or to which inspectors incorporated such measures into enforcement actions:
- **Administration, Protocol, and Resources:** the procedures, approach, and resources involved in conducting the inspections;
- **Regional/State Coordination:** the level and nature of interaction that occurred between the Regions and States during all phases of the inspections, as well as the Regions' perceived benefits and obstacles to increased State involvement; and
- **Overall Impact of the Multi-Media Approach:** outcomes or effects of a multimedia effort across or within agencies or the inspected facilities.

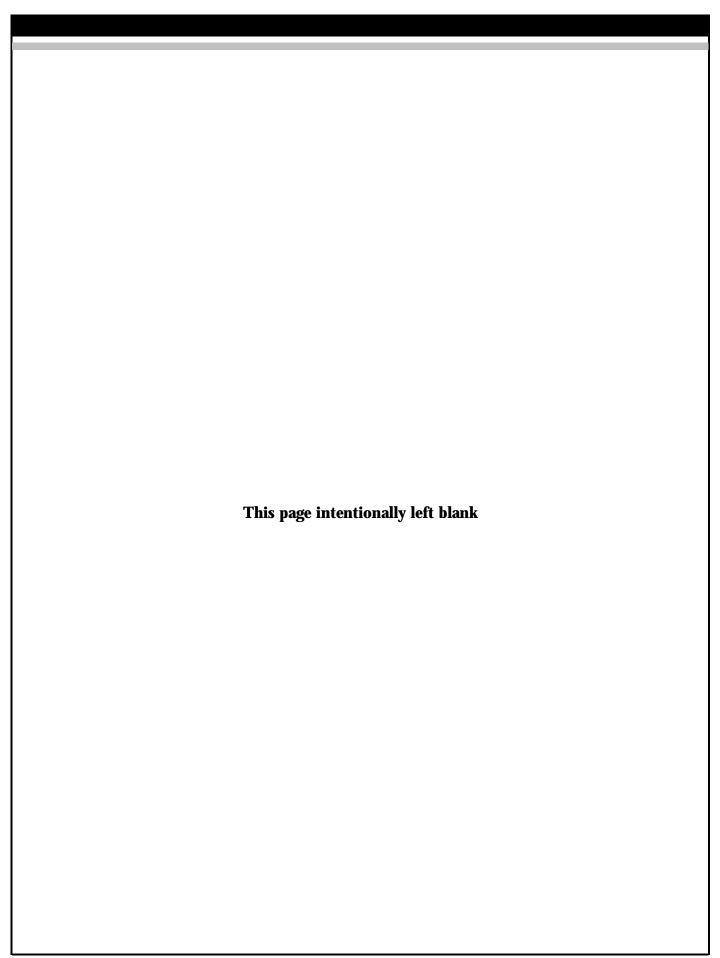
In short, this document assesses how well multi-media inspections and enforcement efforts have served facilities, the Regions, and the States and whether they have achieved FMECI environmental compliance goals.

REPORT OVERVIEW

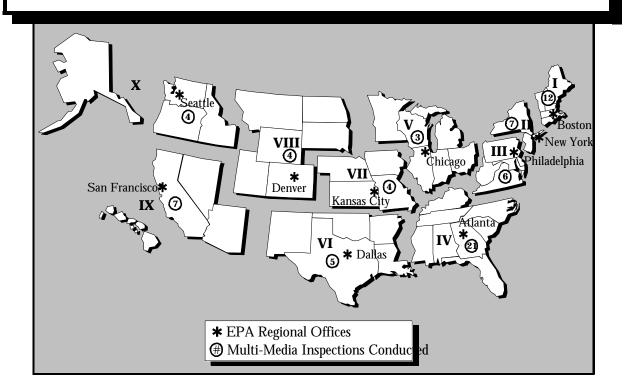
This is the Final National Report on the results of the FMECI; it is the follow-up to the Interim National Report of November 1994. It describes lessons learned from the initiative, barriers to improving environmental compliance at Federal facilities, and potential next steps to address those barriers. This report consists of two major parts. The first contains national highlights for the FMECI. The second presents Region-specific summaries of FMECI experiences.







FMECI National Highlights



Nine out of ten Regions performed at least two multi-media inspections per year.

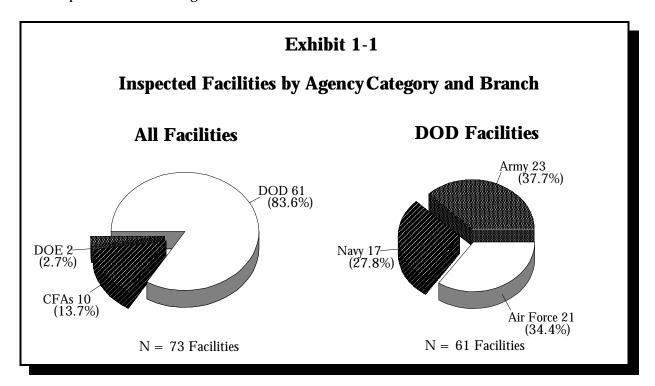
FMECI INSPECTIONS

EPA conducted 73 multi-media compliance inspections during the Federal Facilities Multi-Media Enforcement/Compliance Initiative (FMECI); 41 in FY 1993 and 32 in FY 1994. The number of inspections conducted ranged from three in Region V to 21 in Region IV. Most Regions conducted fewer inspections during the second year of the initiative, although Region IX increased its inspection activity from two in FY 1993 to five in FY 1994. Three other Regions (I, VII, and X) conducted the same number in both years. All Regions, except Region V, conducted an average of at least two inspections per year, as specified in the FMECI operating guidance. Inspections were conducted in 35 States, two Territories, and the District of Columbia.

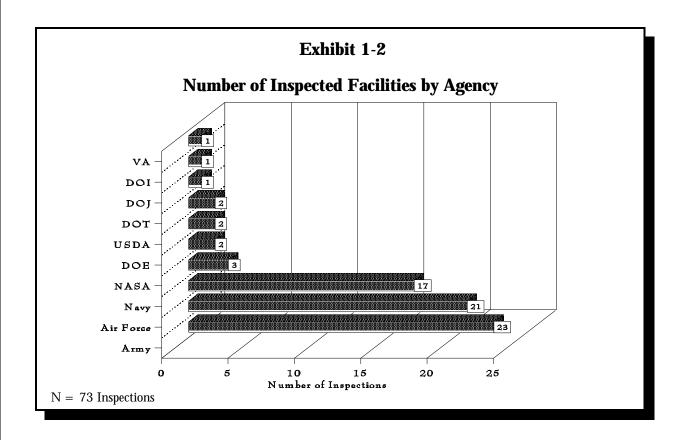
The Department of Defense (DOD) operates 61 of 73, or more than 83 percent, of the facilities examined during the FMECI. The inspected DOD facilities include 21 Air Force, 17

Navy, and 23 Army installations. The remaining 12 inspected facilities include two DOE laboratories and 10 Civilian Federal Agency (CFA) facilities (three NASA space flight centers, two Department of Agriculture research facilities, two Coast Guard installations, a Department of Justice penitentiary, and a Veterans Administration medical center). In addition, as requested by President Clinton in his Earth Day 1993 address, inspectors conducted a multi-media audit of the White House and Old Executive Office Building (referred to herein as the White House Complex).

Exhibit 1-1 presents inspected facilities by agency category (i.e., DOD, CFA, and DOE) and branch of the military service, while Exhibit 1-2 further breaks out the facilities according to their respective individual agencies.

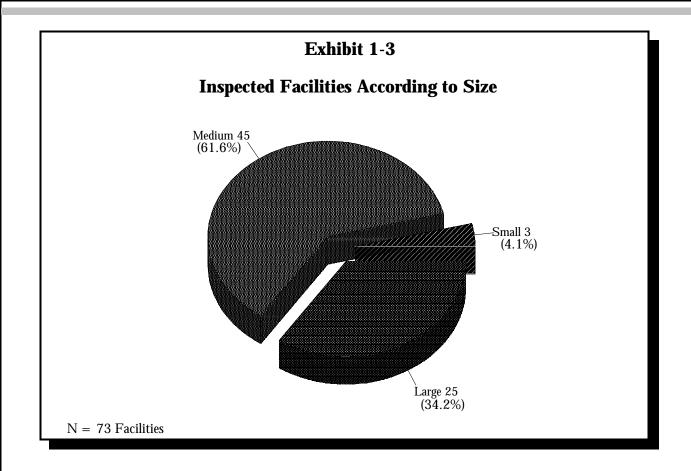


The majority of inspections occurred at DOD facilities



Inspected CFA facilities were drawn from a variety of Agencies.

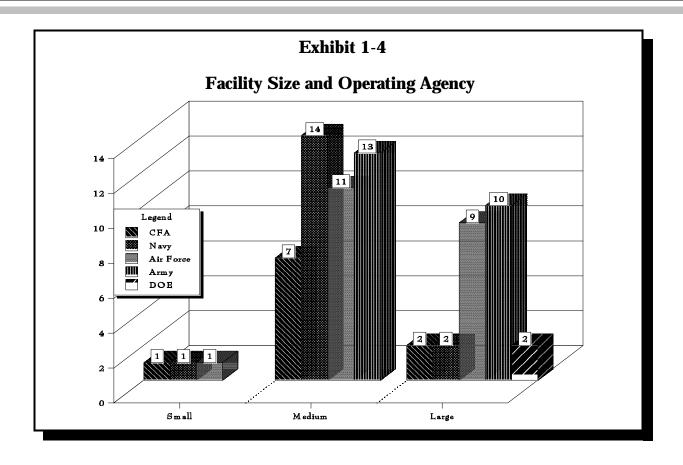
EPA Regions classified most inspected facilities as medium-sized (62 percent) or large (34 percent), with the remainder (4 percent) being classified as small. Between FY 1993 and FY 1994, the percentage of medium-sized and small facilities increased slightly, while the share of large facilities declined by approximately five percent. Exhibit 1-3 presents inspected facilities according to size.



Most inspected facilities are classified as medium-sized.

Most inspected DOD and CFA facilities are medium-sized (62 percent and 70 percent, respectively); however, inspected DOD facilities are more likely to be large than are inspected CFA facilities. Only 20 percent of CFA facilities are large; in contrast, approximately 34 percent of inspected DOD facilities are large.

There also appears to be some correlation between facility size and operating agency (see Exhibit 1-4 below). For example, among military installations inspected during the FMECI, Navy installations are more likely to be medium-sized than Army or Air Force installations. Inspected CFA facilities also tend to be medium-sized. All inspected DOE facilities are classified as large.

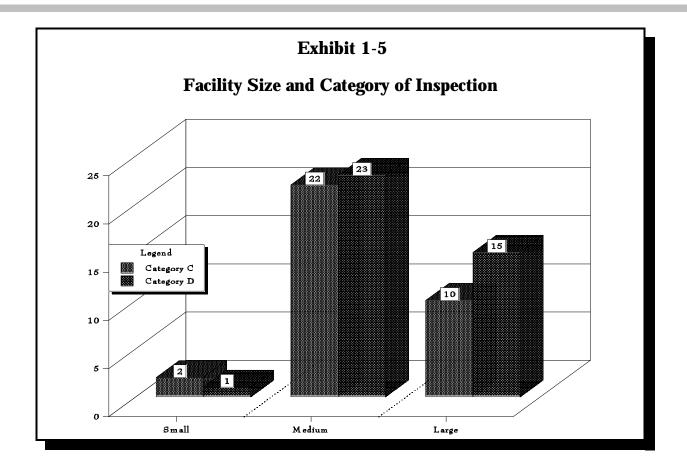


Inspected Navy and CFA facilities tend to be medium-sized; inspected DOE facilities are large.

The intensity and level of resources devoted to the inspections varied somewhat across Regions and facilities; however, all inspections conducted under the FMECI were either Category C or D. Overall, the Regions conducted slightly more Category D than Category C inspections, 39 and 34, respectively. Between the first and second years of the FMECI, the number of Category D inspections increased slightly relative to the number of Category C inspections (in FY 1993, there were 21 Category D inspections and 20 Category C inspections).

As portrayed in Exhibit 1-5, large facilities were slightly more likely to receive the more resource-intensive Category D inspections, while medium-sized facilities were subjected to nearly the same number of Category C and D inspections.

There does not appear to be any strong correlation between agency category and inspection Category. An individual Region's approach to inspections appears to have a greater influence on the Category of inspection a facility receives. In four Regions (I, III, IV, and X), all FMECI inspections were of the same category, regardless of the size or agency affiliation of the facility. The 43 facilities located in these four Regions accounted for nearly 60 percent of the total



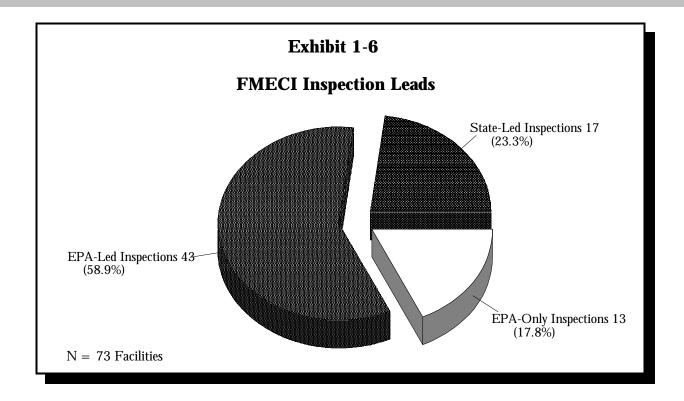
EPA and the States conducted slightly more Category D than Category C inspections.

number of inspections conducted under the FMECI. In addition, Regions II and IX (six and seven inspections, respectively) each conducted the same Category of inspection at all but one of their facilities.

Exhibit 1-6 presents a breakdown of multi-media inspection leads.¹ States assumed a lead role on 23 percent (17 of 73) of inspections conducted under the FMECI. EPA-only inspections accounted for 18 percent (13 of 73), while EPA-led inspections, which include Regional and National Enforcement Investigation Center (NEIC)-led efforts, accounted for 59 percent (43 of 73).

The level of State participation on inspection teams declined slightly between the first and second years of the FMECI. In FY 1993, States participated in 88 percent (36 of 41) of

¹ For the purposes of this Report, a State or EPA is considered the multi-media inspection lead if it acts as the lead agency on the majority of individual environmental media components of the multi-media inspection.



States played an active role in multi-media inspections.

inspections and acted as lead on 34 percent (14 of 41). During FY 1994, the State participation rate decreased to 75 percent (24 of 32) and State-led inspections dropped to only nine percent (3 of 32). For both years of the FMECI, States participated in 82 percent (60 of 73) of the inspections and acted as lead on 23 percent (17 of 73).

Despite this apparent decline in State participation in the inspection phase of the FMECI, Regions did not note any significant new barriers to EPA/State coordination between FY 1993 and FY 1994 (see Exhibit 1-21). Moreover, States remained extremely active in the enforcement phase of the FMECI (see Exhibit 1-20). Many Regions also noted that the overall level of State interaction during all phases of the FMECI remained moderate to high.

FMECI ENFORCEMENT ACTIONS

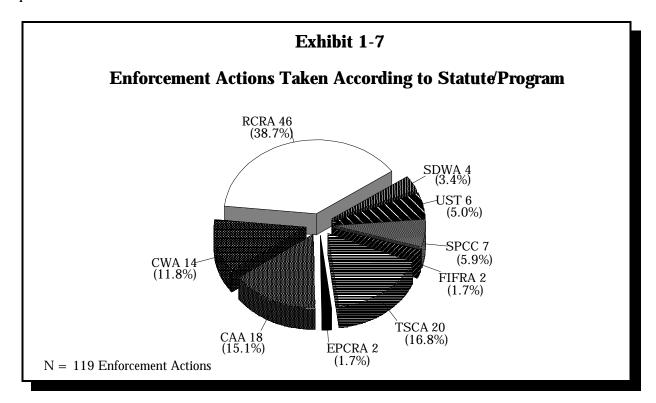
Inspection teams identified 119 violations warranting enforcement actions during the FMECI. In addition, there are a few enforcement actions that may be issued at a later date. The issued enforcement actions consisted of:

Warning Letters

- Notices of Violation (NOV)
- Notices of Noncompliance (NON)
- Field Citations
- Administrative Orders, and
- Federal Facility Compliance Agreements (FFCA).

The level of enforcement activity declined substantially between the first and second year of the FMECI. In FY 1993, Regions and States issued 77 enforcement actions; in FY 1994, the figure was only 42, a decrease of 45 percent. Moreover, this decline cannot be entirely attributed to a reduction in the number of multi-media inspections. The number of enforcement actions per inspection decreased from 1.9 in FY 1993 to 1.3 in FY 1994.

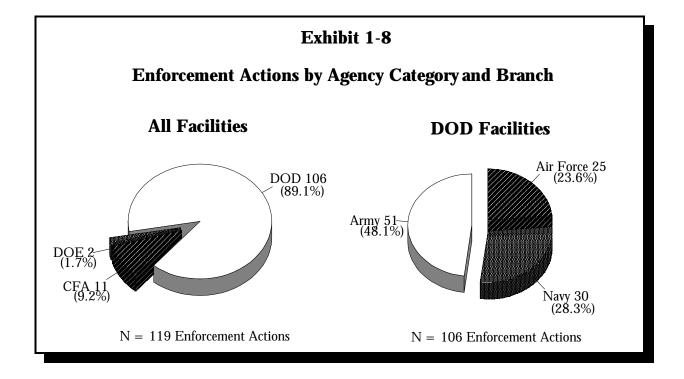
Of the enforcement actions issued as a result of the FMECI, 46 (39 percent) addressed RCRA violations. As can be seen in Exhibit 1-7 below, the four most frequently violated statutes warranting enforcement action (RCRA, CAA, TSCA, and CWA) accounted for nearly 83 percent of all such violations.



A total of 119 enforcement actions were taken under nine different statutes.

The distribution of enforcement actions by statute is essentially the same for medium-sized and large facilities.² Navy, Army, and Air Force facilities had similar violation rates across statutes, although as a group they tended to receive more enforcement actions for CAA violations. Accordingly, CFAs received RCRA, TSCA, and CWA violations in the same relative proportions as the rest of the inspected facilities; however, they were not cited for any CAA violations.

Exhibit 1-8 presents enforcement actions according to agency category and branch of military service. DOD facilities accounted for the vast majority of the violations warranting enforcement actions during the FMECI. In addition, the distribution of enforcement actions by agency category was fairly consistent with the distribution of inspections (see Exhibit 1-1); DOD, DOE, and CFA facilities received 89.1, 1.7, and 9.2 percent, respectively, of enforcement actions compared to 83.6, 2.7, and 13.7 percent, respectively, of multi-media inspections. Comparing these two exhibits also reveals that Army installations received a somewhat disproportionate share of enforcement actions relative to the other branches of the military; Army installations accounted for 37.7 percent of inspected DOD facilities, yet they received 48.1 percent of enforcement actions at DOD facilities. Air Force facilities received 34.4 percent of the inspections and 23.6 percent of enforcement actions, while Navy facilities received 27.8 percent of inspections and 28.3 percent of enforcement actions.



DOD facilities received the majority of enforcement actions.

² Small facilities comprise too small a portion of the universe of inspected facilities to draw any meaningful conclusions regarding the distribution of enforcement actions by statute.

Exhibit 1-9 provides additional detail on the specific types of enforcement actions taken to address violations of environmental statutes. NOVs were the most frequently issued enforcement action, accounting for 34 percent of the total. Administrative Orders and Warning Letters comprised 24 and 22 percent, respectively, of all enforcement actions.

Among the four most frequently violated statutes, NOVs comprised anywhere from 20 percent (TSCA) to 43 percent (RCRA) of actions issued. In percentage terms, Administrative Orders were most frequently issued under RCRA, while Warning Letters were most commonly issued under SDWA. NONs accounted for 70 percent of TSCA enforcement actions and TSCA NONs accounted for 82 percent of all NONs issued during the FMECI. It should be noted that the authority to issue all of these various enforcement actions does not exist under every environmental statute.

Between FY 1993 and FY 1994, there were no significant changes in the distribution of enforcement actions -- NOVs, Administrative Orders, Warning Letters, and NONs, respectively, were the four most commonly issued enforcement actions.

Exhibit 1-9
Type of Enforcement Actions by Statute/Program Violated

Enforcement Action	RCRA	CWA	CAA	TSCA	FIFRA	SPCC	UST	EPCRA	SDWA	TOTAL
Warning Letter	7	4	7	0	0	3	1	0	4	26
NOV	20	5	7	4	1	2	1	0	0	40
NON	0	1	0	14	0	0	0	2	0	17
Administrative Order	19	3	4	1	0	0	1	0	0	28
Field Citation	0	0	0	0	1	0	3	0	0	4
FFCA	0	1	0	1	0	2	0	0	0	4
TOTAL	46	14	18	20	2	7	6	2	4	119

NOVs accounted for more than one-third of enforcement actions under the FMECI.

DOD facilities received approximately 90 percent of the Administrative Orders, NONs, and Warning Letters issued under the FMECI, which is generally consistent with the overall distribution of enforcement actions (DOD facilities received 89 percent of all enforcement actions). CFA facilities were somewhat more likely to receive NOVs, accounting for approximately 15 percent of all NOVs issued compared with only nine percent of all enforcement actions. Comparing the distribution of inspections to the distribution of enforcement actions across branches of the service does not reveal any substantial anomalies. In other words, Army installations, which accounted for the largest share of inspected DOD facilities, received the most

enforcement actions. Moreover, Navy and Air Force installations received smaller and roughly equivalent shares of enforcement actions, which corresponds to their respective shares of inspections at DOD facilities.

In all, EPA and States issued enforcement actions at approximately 75 percent (55 of 73) of the facilities they inspected. Exhibit 1-10 demonstrates how inspections and enforcement actions were distributed across the Regions. Region II issued the most actions, handing down 27 among seven facilities, with Region IV a close second at 26 actions. Region VIII issued the fewest enforcement actions (four actions at four facilities).

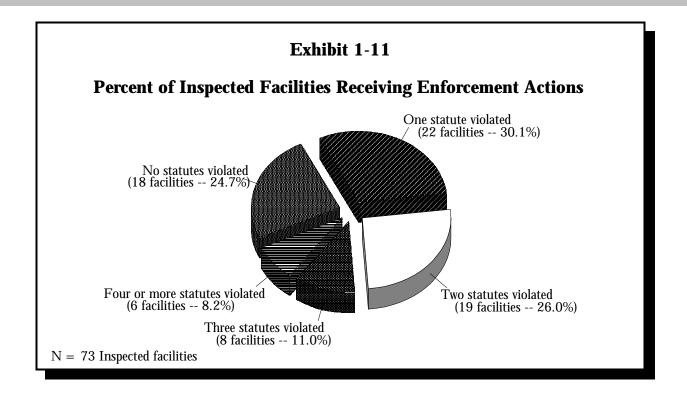
Exhibit 1-10
National Summary of Inspections and Enforcement Actions

Region	Inspections	Enforcement Actions	Actions/ Inspection	Region	Inspections	Enforcement Actions	Actions/ Inspection
I	12	18	1.5	VI	5	6	1.2
II	7	27	3.9	VII	4	5	1.3
III	6	11	1.8	VIII	4	4	1.0
IV	21	26	1.2	IX	7	8	1.1
V	3	6	2.0	X	4	8	2.0
				Total	73	119	1.6

On average, one multi-media inspection resulted in 1.6 enforcement actions.

On a per inspection basis, Region II was the most active, issuing 27 enforcement actions against only seven facilities -- an average of 3.9 violations per inspected facility. And while, Region VIII had the lowest average, it still issued one action per inspected facility. Nationally, the average number of enforcement actions taken to address violations detected during a multimedia inspection was 1.6.

Exhibit 1-11 compares the number of facilities at which enforcement actions were taken to the total number of inspected facilities. Of the 73 facilities inspected, 25 percent (18 of 73) were not subjected to any enforcement actions and an additional 30 percent (22 of 73) received only one enforcement action. The remaining 45 percent (33 of 73) of inspected facilities were cited for violations of multiple environmental statutes. Among the inspected facilities receiving enforcement actions under the FMECI, the median number of environmental statutes violated was two. Thus, the majority of Federal facilities cited for violations violated multiple statutes.



More than 40 percent of all inspected facilities violated multiple statutes.

Inspected Army installations were more likely to violate multiple statutes. They comprised roughly 32 percent of inspected facilities; however, 45 percent of facilities violating multiple statutes and 50 percent of facilities cited for violations of three or more statutes were Army installations. In contrast, Air Force installations and CFA facilities comprised only 15 and three percent, respectively, of facilities cited for violations of multiple statutes; although they represented approximately 29 and 14 percent, respectively, of inspected facilities.

Exhibit 1-12 depicts the proposed and final penalties associated with EPA- and State-issued Administrative Orders and Field Citations.³ Federal facilities located in seven of 10 EPA Regions were subject to enforcement actions in which EPA and/or States proposed penalties. As of September 30, 1995, the total amount of proposed penalties was more than \$3.7 million. Final penalties issued were substantially lower -- approximately \$800,000; however, proposed penalties of more than \$2.0 million remain under review in five Regions.

³Penalties are not generally associated with FFCAs, NOVs, NONs, or Warning Letters.

Exhibit 1-12
National Enforcement Actions and Penalties

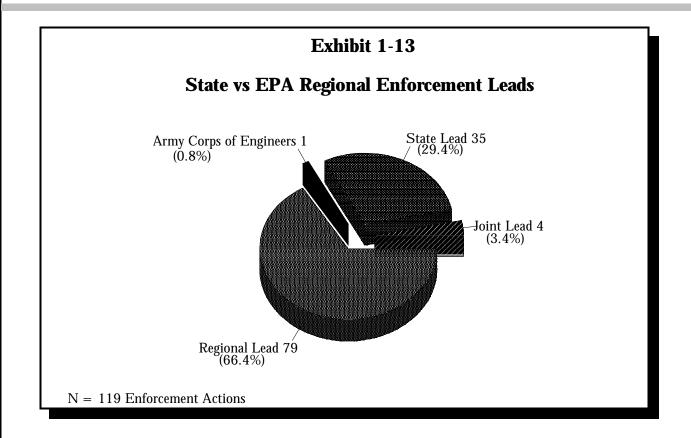
Type of Enforcement Action	Number of Enforcement Actions	Proposed Penalties	Penalties Collected to Date		
Administrative Order	28	Region I \$471,171 State \$59,000 Region II \$250,765 Region III \$115,000 State \$40,000 Region IV \$285,000 Region V \$102,400 Region IX \$1,100,400 State \$11,200 Region X \$1,300,000	Region I \$366,177*† State \$59,000 Region II \$41,565† Region III \$92,500* State \$30,000† Region IV \$75,000 Region V \$60,200 Region IX \$77,347*† State \$11,200 Region X Under Review		
Field Citation	4	None	None		
Total	32	\$3,734,936	\$812,989 [†]		

^{*} Final Penalty includes negotiated Supplemental Environmental Project

Seven of ten Regions issued penalties as a result of multi-media inspections.

In addition to participating on the inspection teams, States actively enforced requirements under the FMECI. Of the 119 enforcement actions taken, States led 35 (29 percent). The level of State involvement in the enforcement phase of the FMECI declined substantially from FY 1993 to FY 1994. In FY 1993, States took the lead on 35 percent (27 of 77) of enforcement actions, while in FY 1994, the State share was only 19 percent (8 of 42). In addition, joint leads accounted for 3.4 percent (4 of 119) of enforcement actions and the U.S. Army Corps of Engineers took the lead on a single enforcement action to address wetlands violations under the CWA at Aberdeen Proving Ground in Maryland. Exhibits 1-13 and 1-14 show how these State actions during the FMECI were distributed among the various types of actions.

[†] Total penalties as of December 15, 1995; others remain under review.



Regions led two-thirds of all enforcement actions; States led nearly 30 percent

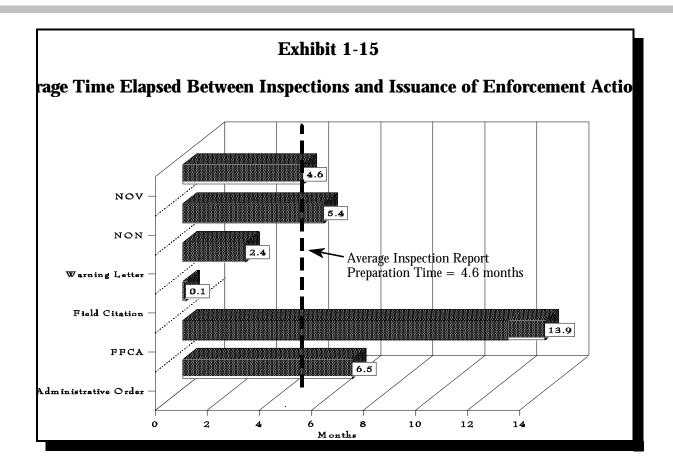
Exhibit 1-14
Enforcement Action Leads

Enforcement Action	State Lead	Regional Lead	Joint Lead	Other
Warning Letter	11	15	0	0
NOV	11	28	1	0
NON	1	16	0	0
Administrative Order	11	13	3	1
Field Citation	1	3	0	0
FFCA	N/A	4	0	0
Total	35	79	4	1

Regions took the lead on the majority of actions within every enforcement action category

Exhibit 1-15 presents the average time required to issue various enforcement actions at Federal facilities following a multi-media inspection. The average time required to initiate an enforcement action following a multi-media inspection ranged from less than two weeks to nearly fourteen months. In general, enforcement actions initiated and issued simultaneously (e.g., NOVs, warning letters) took less time to issue than did actions that involve a period of negotiation or opportunity for public comment between their initiation and issuance (e.g., Administrative Orders, FFCAs).

FFCAs took an average of nearly 14 months to issue, while, on average, Administrative Orders took almost seven months. NONs consumed slightly more than five months from inspection to issuance, and NOVs took slightly less than five months. During the FMECI, two FFCAs and two Administrative Orders were not completed within one year. Among other enforcement actions, only two (NOVs at the Roosevelt Roads Naval Station in Puerto Rico and the Naval Computer and Telecommunications Station in Maine) took more than one year to initiate following an inspection. As one might expect, warning letters and field citations were the most expedient of all enforcement actions. Overall, 95 percent of enforcement actions taken under the FMECI were issued within one year and approximately two-thirds of all actions were issued prior to the completion of the final multi-media inspection reports.



Most enforcement actions were issued within one year of the inspection.

For those Regions reporting, the average time elapsed from inspection to report completion declined from approximately 5.1 months during FY 1993 to 3.7 months during FY 1994; thus, the average time required for the two-year period was approximately 4.6 months. Several Regions noted that multi-media inspections were resource intensive; however, only two Regions specifically observed that the time required to prepare the multi-media inspection reports may have delayed the issuance of enforcement actions.

Multi-media enforcement actions involve using a single enforcement action to collectively address violations under multiple environmental statutes. Most Regions did not actively pursue multi-media enforcement actions. Four Regions indicated that they had explored multi-media enforcement opportunities at inspected facilities, and only two Regions (II and V) issued enforcement actions addressing violations of multiple statutes. Regions cited the following reasons for the lack of substantial multi-media enforcement coordination:

• The discovered violations were straightforward, single-program violations;

- Parties who were encouraged to take multi-media enforcement actions saw no benefit that would off-set the extra time required to coordinate such an effort; and
- Coordination was difficult because of varying levels of enforcement authorities and the lack of substantial violations.

POLLUTION PREVENTION

Some Regions actively pursued pollution prevention remedies as an enforcement tool during the FMECI. Most Regions noted the importance of pollution prevention and the expectation that it would become more prominent in the future. Federal facilities in five Regions have either implemented pollution prevention Supplemental Environmental Projects (SEPs) or at least explored their feasibility. In addition, three of these five Regions have included pollution prevention remedies and conditions into enforcement settlements. For example, Region I incorporated two separate pollution prevention remedies into settlements with the U.S. Coast Guard Academy. The remedies involved replacing two USTs with a single above ground dual compartment tank and construction of a new container storage area. Similarly, Region IV required Air Force Plant #6 to submit a pollution prevention action plan, setting forth actions and dates for reduction of pollutants, as part of an enforcement action.

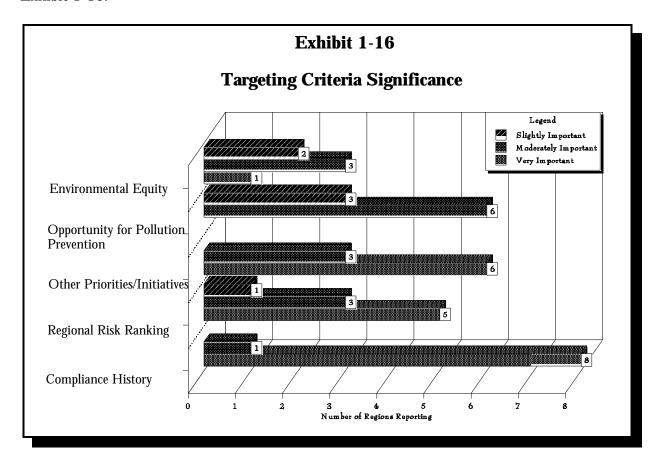
Several other Regions reported pursuing less formal pollution prevention strategies at inspected facilities. At least two Regions made specific pollution prevention recommendations that were later adopted by facilities, while another Region noted that immediately following a multi-media inspection, the facility initiated several pollution prevention measures. In FY 1993, six Regions provided Pollution Prevention Opportunity Profiles to facilities at the time of the inspections. During FY 1994, most Regions elected not to distribute the Profiles, citing their lack of up-to-date information. The Profiles identify processes, measures, operation and maintenance functions, and technologies that facilities can explore to prevent the creation or release of pollutants during facility activities. FFEO compiles the Profiles using a hybrid approach that combines facility mission and facility specific environmental data. Appendix I contains a sample Profile.

ADMINISTRATION, PROTOCOL, AND RESOURCES

Recognizing that the FMECI entails administrative, procedural, and resource demands for both the Regions and States, FFEO surveyed the Regions about their experiences in selecting facilities, composing and organizing teams, conducting the inspections, and issuing enforcement actions. When selecting facilities for inspection, EPA suggested that the Regions consider the following five criteria:

- Compliance history
- Regional risk ranking
- Other Regional priorities and initiatives
- Opportunities for pollution prevention, and
- Environmental equity.

The relative importance Regions attributed to these factors when selecting facilities is shown in Exhibit 1-16.



Most Regions considered compliance history to be the most important targeting criterion.

Compliance history was the single most important factor the Regions considered when targeting facilities for multi-media inspections; eight of nine reporting Regions identified compliance history as very important. At least five Regions considered risk-ranking and relationships to other priorities as very important, while opportunities for pollution prevention and environmental justice were considered less important. Three Regions did not take environmental justice into account when targeting facilities.

Only one Region specifically stated that the targeting criteria resulted in CFA facilities being excluded from consideration for receiving a multi-media inspection; however, three Regions did not inspect any CFA facilities during the FMECI, and two more admitted that CFAs tended to receive a lower inspection priority relative to large military installations. Only Region VII actually inspected more CFA facilities than DOD or DOE installations.

Nine Regions cited a total of 10 cases in which they sought assistance from the National Enforcement Investigation Center (NEIC), FFEO, or the Risk Reduction Engineering Laboratory (RREL), or in which they referred cases to the Office of Criminal Enforcement (OCE). NEIC was the most frequently cited technical reference used by Regional staff during the FMECI -- NEIC acted as lead on four inspections in three Regions, and three additional Regions reported obtaining assistance from or consulting with NEIC on inspections. Noting other sources of assistance, the Regions mentioned the participation of the Regional Environmental Services Division Laboratories, either on inspections or in analyzing samples taken during inspections.

Overall, the Regions perceived that the facilities involved in multi-media inspections were professional, cooperative, and positive in responding to the FMECI. Five Regions especially noted the cooperation they had received from facilities. This included cases in which facilities initially responded with shock to the arrival of inspections teams.

Exhibit 1-17 below illustrates a comparison of Regional experience with respect to team sizes, inspection durations, advance notifications, conduct of briefings, and whether Regions provided facilities with FMECI overview information.

Exhibit 1-17 Conduct of Inspections

Region	Avg. Size of Inspection Team	Avg. Duration	Notice	Briefings	FMECI Brochure Provided
I	11	2 Days	No	In- and out-briefing	Yes
II	10	4 Days	Yes	In- and out-briefing	Yes
III	19	8 Days	Yes	In- and out-briefing	Yes
IV	8	2 Days	Yes	In- and out-briefing	Yes
V^4					
VI	7	7 Days	No	In- and out-briefing	Yes
VII	9	2 Days	Yes	In- and out-briefing	Yes
VIII	10	4 Days	Yes	In- and out-briefing	Yes
IX	8	8 Days	No	In- and out-briefing	Yes
X	9	7 Days	No	In- and out-briefing	No
National Avg.	11	5 Days			

Conduct of multi-media inspections was fairly consistent across Regions; some significant variation occurred with respect to inspection duration and advance notice.

With the exception of Region III, there was minimal variation in the size of the multimedia inspection teams. Average inspection duration ranged from two to eight days, with an average of five days. Reporting Regions were fairly equally divided with respect to providing facilities with advance notice of inspections. All reporting Regions provided in- and out-briefings and all but one provided the FMECI brochure to inspected facilities.

⁴Insufficient data provided.

Exhibit 1-18 summarizes the Regions' findings with respect to FMECI resource requirements. Most Regions experienced some impact on resource allocation associated with the FMECI. Three Regions referred to limited travel funds, a factor to which two of the Regions adapted by inspecting nearby facilities. One Region noted a need to shift resources, for example, from private inspections to Federal facility inspections, and another reported that the use of Regional staff for inspections, instead of NEIC, prompted complaints that the FMECI was "stealing" from non-Federal cases. In contrast, two Regions reported no resource problems because they obligated sufficient funds during the budget process to cover the costs of the FMECI.

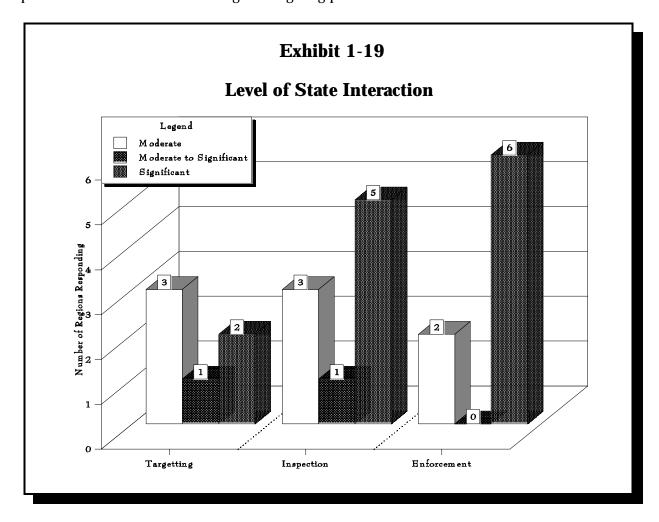
Exhibit 1-18 FMECI Resource Allocation Impacts

Region	Impact on Resources
I	No effect on availability of staff, however, travel funds were limited and affected the choice of inspected facilities.
II	Region was already conducting approximately 12 multi-media inspections per year. Implementation of the FMECI simply involved shifting resources from private to Federal inspections.
III	Resulted in a significant diversion of resources away from other Regional/State enforcement priorities.
IV	Regional planning and budgeting avoided any potential negative resource implications.
V	No data available
VI	Regional planning and budgeting avoided any potential negative resource implications.
VII	Resulted in a significant diversion of resources away from other Regional/State enforcement priorities.
VIII	Resulted in a significant diversion of resources away from other Regional/State enforcement priorities. Travel funds were limited.
IX	Travel funds were limited and affected the choice of inspected facilities.
X	Single-media program enforcement staff expressed concern over the resources required by the FMECI.

Most Regions noted some resource-related impacts associated with the FMECI.

REGIONAL/STATE COORDINATION

The level of Regional/State coordination shown by the Regions and States throughout the FMECI was significant. As illustrated in Exhibit 1-19 below, Regions reported interaction levels between Regional and State offices as more intensive during the inspection and enforcement phases of the FMECI than during the targeting phase.



Regions noted a fairly high level of involvement by States in FMECI activities, particularly during the inspection and enforcement phases.

Three Regions reported that no interaction occurred during the targeting of facilities; three reported a moderate level of interaction; and two reported a significant level. One Region noted a moderate-to-significant level of interaction during the targeting stage.

Five Regions reported significant coordination levels between EPA and States during the inspection stage, and three Regions described interaction during that stage as moderate. During

enforcement, six Regions noted significant levels of interaction, two reported moderate levels of coordination, and one Region indicated that the level of interaction was not applicable.

States led enforcement efforts in approximately 30 percent (35 of 115) of enforcement actions. State actions most frequently consisted of Warning Letters, NOVs, and Administrative Orders. Regions and the States exercised joint lead in four enforcement actions, an NOV in one Region and three RCRA §3008(a) Orders in another. Three Regions reported that State Enforcement Agreements (SEAs) enhanced States' ability to participate in FMECI. The remaining Regions either did not report, or stated that SEAs did not affect State participation. One Region described SEAs as providing a framework for joint inspections which facilitated coordination between Regional and State program staff. Another Region stated that SEAs are beginning to include the multi-media enforcement concept. In contrast, another Region stated that it has not used SEAs for many years.

Nine Regions reported benefits to State and Regional involvement, citing most frequently: enhanced communication; training opportunities; mutual understanding; cooperation; and sharing of data and technical assistance. The Regions reported other benefits including: thorough inspections; State familiarity with facilities as assisting Regions with inspections; joint assessment of compliance problems; improvement of State relationships; and opportunities for joint partnerships.

The Regions also reported several obstacles to Regional and State coordination. Two Regions named scheduling as a primary obstacle. Other obstacles included difficulty in identifying appropriate participants; the need to meet security and access requirements; extra time required for State enforcement decisions; difficulty in agreeing to "lead" responsibilities for delegated programs; and different inspection protocols (e.g., announced vs. unannounced inspections).

Seven of the Regions responding indicated that the FMECI had no negative ramifications for Region/State relations. Of the two Regions that perceived problems, one cited different enforcement philosophies within EPA and the States. As an illustration, this Region referred to one State agency issuing a penalty to a facility, while another State agency issued a relatively mild enforcement action for a comparable violation at a different facility. Another Region noted that States do not perceive added value from multi-media inspections. According to this Region, the States would rather refer inspections to other program offices. The Region also stated that multi-media considerations delay enforcement actions. Exhibit 1-20 summarizes these benefits and barriers.

Exhibit 1-20 Benefits and Barriers to Regional/State Coordination

Benefits

- Communication and improved relationships
- Training and partnership opportunities
- Mutual understanding and cooperation
- Joint assessment of compliance problems
- More thorough inspections

Barriers

- Scheduling difficulties
- Identifying appropriate participants
- Security and access problems
- Time required for State decision-making
- Reaching agreement on lead responsibilities
- Different inspection protocols

Between FY 1993 and FY 1994, the relationship between the States and several Regions improved. Enhanced communication, inspection coordination, and enforcement action involvement between Regions and States were reported by at least three Regions. Three other Regions reported no change in the Regional/State relationships. No Regions noted any deterioration with respect to any phase of the multi-media inspection/enforcement process.

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Six of nine Regions responding stated that the FMECI resulted in increased interest in using multi-media inspections, although one Region commented that it could allocate necessary resources for only a small number of inspections. The Regions viewed the inspections as an effective enforcement tool that expands the knowledge of inspectors.

Relative to conventional single-media inspections, two Regions reported that multi-media inspections are more efficient, however, two other Regions noted just the opposite. The principal benefits and barriers associated with a multi-media inspection approach, as reported by the Regions, are presented in Exhibit 1- 21.

Exhibit 1-21 Benefits/Barriers to Multi-Media Inspections

Benefits

- Encourages upper level management to focus on environmental compliance matters
- Provides comprehensive compliance examination of facilities
- Allows determination of strengths and weaknesses of facility environmental programs
- Allows identification of technical needs of facilities
- Provides Regions and States an opportunity to exchange information

Barriers

- Limited travel funds
- Multi-media inspections can be time-consuming and require extensive resource, logistical, and decision-making coordination

Overall, the Regions perceived facilities involved in multi-media inspections to be professional, cooperative, and positive in responding to the FMECI. Regions also noted that facility environmental staff often welcomed the inspections because the attention inspections brought to environmental management reinforced the importance of their efforts. Three Regions mentioned the effectiveness of the FMECI in involving upper management staff at facilities and one Region noted the responsiveness of base commanders, stating that commanders frequently will send follow-up letters outlining the corrections made as a result of inspections.

Regions also described some of their concerns that arose during the implementation of the FMECI. These ranged from potential difficulties incorporating multi-media inspections as a standard Regional program element once the FMECI concludes, to concerns on the part of facility personnel about criminal liability associated with environmental violations discovered during inspections, and the effect these concerns could have on facility participation.

SUMMARY

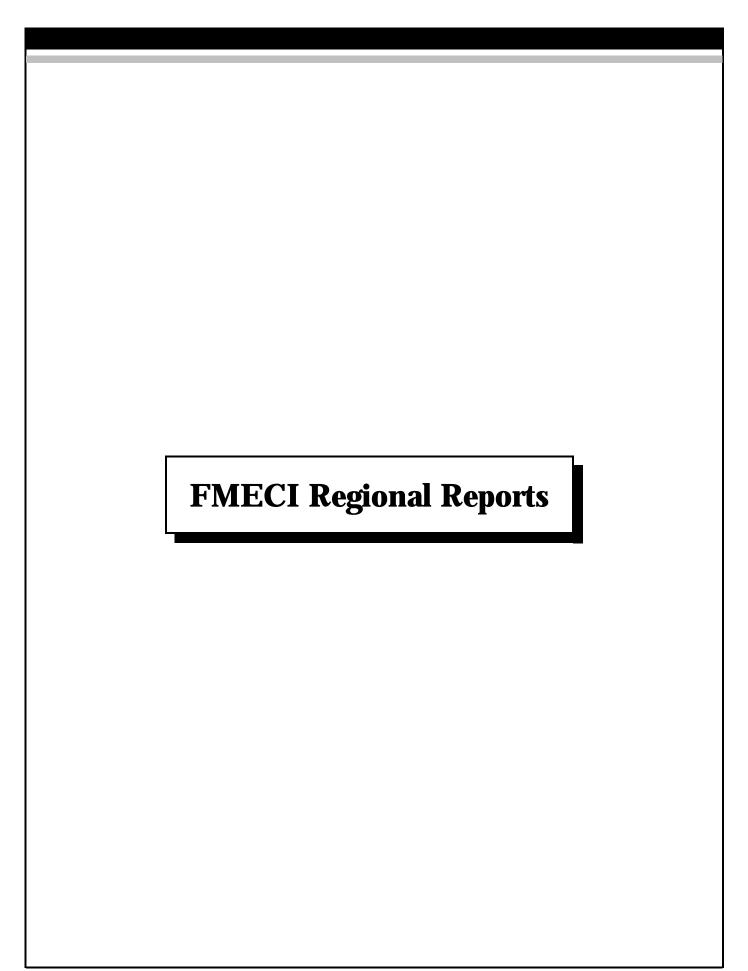
EPA's experience during the FMECI reveals some of the immense potential benefits associated with multi-media inspections. Fully implemented, the multi-media approach can lead to significant improvements in environmental compliance at Federal facilities. Specifically, the FMECI demonstrates the following:

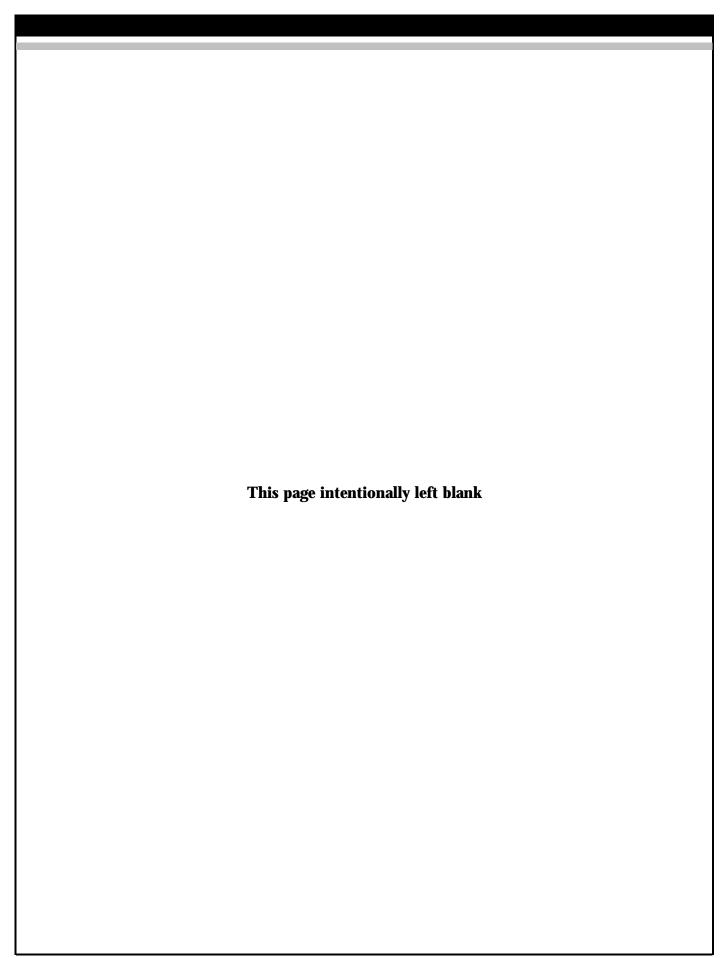
- The 73 FMECI inspections represent a significant investment in the Federal facility sector by EPA Regions and participating States.
- EPA and States issued 119 enforcement actions for violations under nine separate environmental statutes. Enforcement actions taken were

appropriate to the significance of or level of non-compliance encountered at facilities.

- More than 45 percent (33 of 73) of all inspected Federal facilities violated multiple statutes. Of the Federal facilities receiving enforcement actions, 60 percent (33 of 55) violated more than one statute.
- EPA documented significant levels of and benefits from State involvement in the FMECI.
- EPA's procedures and approach to conducting multi-media inspections can be effective, regardless of the size or operating agency of the facilities involved.
- Seven out of ten Regions proposed a total of more than \$3.7 million in penalties.
- EPA and States began to encourage facilities to adopt Pollution Prevention strategies as first choice measures to return to and maintain compliance.

The remainder of this Report presents Regional results during the FMECI.







EPA New England (Region I), with Headquarters in Boston, Massachusetts, consists of six States in the Northeast: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Region I has been conducting Federal facility multi-media inspections since 1990. During the FY 1993-94 FMECI, it conducted a total of 12 multi-media inspections, six during each year of the Initiative. All multi-media inspections conducted in Region I were Category D inspections. All inspected facilities were medium-sized, and the complexity level of compliance issues at the facilities varied from low to high.

COMPLIANCE/ENFORCEMENT

Region I used a variety of enforcement tools, issuing the 12 inspected facilities a total of 19 enforcement actions. The number of enforcement actions decreased slightly from FY 1993 to FY 1994. As seen in Table 1, Region I issued NOVs, NONs, Warning Letters, and RCRA §3008(a) Administrative Orders.

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Warning Letter	1	
Notice of Noncompliance	3	1
Notice of Violation	4	5
Administrative Order	3	2
Total Number of Actions	11	8

The Region issued enforcement actions for RCRA violations pertaining to hazardous waste identification, improper waste management, land disposal restriction notifications, and personnel training and assessed final penalties of \$57,223 at the Naval Construction Battalion Center and \$49,700 at the U.S Army Natick Research Center, and proposed penalties of

\$81,300 at the Vermont Air National Guard Station. Region I cited RCRA violations at all inspected facilities, but also subjected facilities to enforcement actions under TSCA and CWA.

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED	
FY 1993	FY 1993				
South Weymouth Naval Air Station, MA	NON NOV	Issued Issued	CWA RCRA	None None	
U.S. Coast Guard Academy, CT	Administrative Order	Issued	RCRA	\$171,809 (P) \$259,254 (F)	
New London Naval Submarine Base, CT	Warning Letter Administrative Order	Issued Issued	CAA RCRA	None None	
Naval Construction Battalion Center, RI	NOV Administrative Order	Issued Issued	RCRA RCRA	None \$101,062(P) \$57,223 (F)	
Westover Air Force Base, MA	NOV NON	Issued Issued	RCRA TSCA	None None	
Brunswick Naval Air Station, ME	Administrative Order NON	Issued Issued	RCRA TSCA	\$59,000(F) None	
FY 1994					
U.S. Army Natick Research Center, MA	Administrative Order	Issued	RCRA	\$117,000(P) \$49,700(F)	
Naval Undersea Warfare Center, RI	NOV	Issued	RCRA	None	
U.S. Coast Guard Support Center, MA	NOV	Issued	RCRA	None	
Air National Guard Station, VT	Administrative Order	Issued	RCRA	\$81,300(P)	
Naval Security Group Activity, ME	NOV	Issued	RCRA	None	
Naval Computer and Telecommunications Station, ME	NON NOV NOV	Issued Issued Issued	TSCA SPCC RCRA	None None None	

The Region shared the lead with the States on both FMECI inspections and enforcement actions. For example, during FY 1993, the Region took the enforcement lead for the TSCA violation at Brunswick Naval Air Station and the RCRA violation at the Naval Construction Battalion Center. Respective States led enforcement actions related to the CWA violation at South Weymouth Naval Air Station, Massachusetts; the CAA violation at the Naval Submarine Base New London, Connecticut; and for the RCRA violation at Brunswick Naval Air Station, Maine. The Region referred RCRA enforcement actions against the Naval Submarine Base New London, Connecticut and Westover Air Force Base, Massachusetts, to the States. The Region and Massachusetts shared the lead for the RCRA action at South Weymouth Naval Air Station. During FY 1994, Region I took the lead on all enforcement actions issued as of the publication of this report; however, the Region also made several referrals to State authorities to address RCRA and CWA issues. As seen in Table 3, the States exercised the enforcement lead for six actions, all during FY 1993.

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1994
Warning Letter	1	
Notice of Violation	2	
Notice of Noncompliance	1	
Administrative Order	2	
Total Number of Actions with State Lead	6	0

The Region has not yet explored multi-media enforcement opportunities, but did notice enhanced environmental compliance, and an increase in the awareness of compliance issues at facilities receiving multi-media inspections under the FMECI. Region I also stated that the FMECI resulted in additional multi-media settlements and an increase in the number of administrative settlements.

POLLUTION PREVENTION

During FY 1993, the Region reported that no pollution prevention remedies were incorporated into settlements; however, in FY 1994, Region I incorporated two separate pollution prevention remedies into settlements with the U.S. Coast Guard Academy, Connecticut. The remedies involve replacing two USTs with a single above ground dual compartment tank and construction of a new container storage area. In addition, the Region pursued supplemental environmental projects (SEPs) as part of its enforcement settlement with

the U.S. Army Natick Research Center. However, the facility was not interested in including a SEP as part of its settlement.

Region I has been diligent in identifying possible corrective measures to be taken at facilities, such as additional training, posting of signs, installation of filters, and establishment of containment or collection systems. The Region noted such measures in the "Areas of Environmental Concern" discussion in the individual inspection reports.

Region I distributed pollution prevention opportunity profiles in FY 1993, but not in FY 1994 because the Region did not receive any updated profiles.

ADMINISTRATION, PROTOCOL, AND RESOURCES

When selecting facilities for inspection, Region I placed the greatest emphasis on facility compliance history, environmental justice concerns, the NEIC risk ranking system, and geographic initiatives. Other factors evaluated include the facility's NPL and/or base closure status, as well as Toxics Release Inventory (TRI) data. The Region's emphasis on the above targeting criteria did not result in excluding Civilian Federal Agency (CFA) facilities from its list of facilities to be inspected, and a CFA was inspected each year. The Region did acknowledge, however, that there is often little or no compliance data for CFAs to consider in the selection process.

During the FMECI, Region I obtained technical assistance from FFEO during the enforcement phase. The Region also notified the Regional Office of Criminal Enforcement (OCE) of all multi-media Federal facility inspections and participated in the follow-up criminal investigation of the Naval Submarine Base in New London, CT, among others. Typically, Region I's Lexington Environmental Services Division sent a representative to inspections to assist with sampling and conducting inspections in media programs not otherwise represented.

Region I indicated that the FMECI had no significant impact on the availability of staff for enforcement efforts. In FY 1993 and FY 1994, an average of 11 people participated in each Region I multi-media inspection, including State inspectors. Most inspections took two days.

While some of Region I's enforcement actions were issued after the one-year time frame, the overall average for issuance was eight months. The Region suggested accelerating the development of the inspection report, shortening negotiations, and obtaining a quicker response from the facility to requests for information so that all enforcement actions could be finalized within the one-year FMECI time frame.

The Federal Facilities Program Manager contacted the facilities the afternoon before each of the inspections. The Region noted that facilities were generally cooperative and forthcoming

with information. The Region coordinated and held an in-briefing on the first morning of each inspection and an exit briefing with the base commander/facility director and his or her staff.

REGIONAL/STATE COORDINATION

In general, Region I reported a high level of interaction between the Region and the States during the targeting, inspection, and enforcement stages of the FMECI. Eleven of twelve multimedia inspections included State representatives on the inspection teams.

Region I does not consider the FMECI to have had a negative impact on EPA/State coordination, in part because enactment of the Federal Facility Compliance Act presented an effective tool for encouraging cooperation. Furthermore, Region I recognized several benefits and no obstacles to Regional/State coordination (see Table 4). Before passage of the Act, State RCRA personnel were viewed as less interested in participating in inspections because they lacked the authority to assess penalties. Now, with stronger enforcement powers, States believe that their participation in inspections will have an impact. Region I views State participation as important because State enforcement staff tend to be more familiar with the facilities and have inspected the facilities more frequently than their Federal counterparts. The Region also noted that the coordinated multi-media inspections enable EPA and State inspectors to share information immediately, resulting in expedited compliance determinations.

Table 4 Regional/State Coordination

Benefits To Increased Coordination

- States more familiar with facilities
- Regional and State inspectors able to share information immediately
- Expedited compliance determinations

Obstacles To Increased Coordination

None reported

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Region I noted an increased interest in conducting multi-media inspections as a result of the FMECI and has developed a "do's and don'ts" paper for its enforcement managers. The Region believes that a multi-media approach focuses facility managers' attention on the inspection, more so than single-media inspections. After the inspection, the base commander/facility director received a complete environmental compliance "snapshot" of his/her

facility. Often this is the first time the commanders focus on their environmental programs as a whole and they begin to examine the strengths and weaknesses (e.g., organization, staffing, training) of their environmental management programs. Multi-media inspections have lead to stronger environmental management programs and enhanced overall environmental compliance. Likewise, the multi-media inspections provide Region with a comprehensive compliance examination of the facility and allow for identification of the technical assistance needs. Multi-media inspections also provide Regional and State enforcement staff with the opportunity to exchange information about the different media programs (see Table 5).

Table 5 Benefits/Barriers to Multi-Media Inspections

Benefits

- Encourages upper-level Federal facility management to focus on environmental compliance matters
- Provides facilities with a comprehensive "snap shot" of environmental compliance
- Allows for an initial review of strengths and weaknesses of facility environmental programs
- Allows identification of technical needs of facility
- Provides the Region and States an opportunity to exchange information and coordinate enforcement actions

Barriers

- When travel funds are limited, it is difficult to coordinate inspections far from the Regional Office; however, this is not unique to multi-media inspections
- If there are limited knowledgeable facility staff available to escort the inspectors, the inspectors' time is not used as wisely as during single-media inspections.



EPA Region II, with Headquarters in New York, New York, consists of two States, a Commonwealth, and a Territory: New Jersey, New York, Puerto Rico, and the Virgin Islands. Region II conducted seven multi-media inspections as part of the FMECI; five in FY 1993 and two in FY 1994. Region II conducted six Category D multi-media inspections and one Category C inspection (at the Plum Island Animal Disease Center). Sizes of the facilities ranged from medium to large. Five of six facilities posed moderately complex compliance issues, while one posed a low level of complexity.

COMPLIANCE/ENFORCEMENT

All seven inspected facilities in Region II have been subject to enforcement actions, with a total of 27 enforcement actions issued (see Table 1). Region II used a variety of enforcement tools, including: Warning Letters, NOVs, NONs, and Administrative Orders. In addition, the Region pursued and signed two multi-media enforcement settlements in the form of Federal Facility Compliance Agreements (FFCA) with Plum Island Animal Disease Center to address SPCC and CWA violations and with Picatinny Arsenal to address TSCA and SPCC violations.

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Warning Letter	3	
Notice of Noncompliance	3	1
Notice of Violation	8	2
Administrative Order	4	2
FFCA ⁵	4	
Total Number of Actions	22	5

⁵ The FFCAs signed with Plum Island and Picatinny Arsenal each represent two enforcement actions because they address violations of two separate statutes/programs.

The Region noted that the involvement of two programs in the multi-media inspection of USDA Plum Island Animal Disease Center resulted from concerns raised by other media inspectors who previously visited the site. In addition, Region II issued a multi-media FFCA against Plum Island Animal Disease Center and Picatinny Arsenal. Region II identified violations of seven separate statutes or programs during its multi-media inspections, with the most frequently cited violations being RCRA, SPCC, CAA, and TSCA (see Table 2).

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED
FY 1993				
USDA Plum Island Animal Disease Center, NY	Warning Letter 2 NOVs FFCA Administrative Order	Issued Issued Issued Issued	SPCC CWA, RCRA CWA, SPCC RCRA	None None None \$209,200(P)
U.S. Army Armament Research & Development Command - Picatinny Arsenal, NJ	2 NOVs NON Administrative Order Administrative Order FFCA	Issued Issued Issued Issued Issued	RCRA, CAA TSCA, RCRA CAA SPCC, TSCA	None None \$41,565 (F) None None
Watervliet Arsenal, NY	2 NOVs NON Warning Letter	Issued Issued Issued	RCRA, UST TSCA SPCC	None None None
U.S. Naval Station Roosevelt Roads, PR	2 NOVs Warning Letter Administrative Order	Issued Issued Issued	CAA,SPCC UST CWA	None None None
Air Force Plant #59, NY	NON	Issued	EPCRA	None
FY 1994				
U.S. Army Garrison/ Military Ocean Terminal, NJ	Administrative Order NOV NON	Issued Issued Issued	CAA RCRA TSCA	None None None
Plattsburgh Air Force Base, NY	Administrative Order NOV	Issued Issued	CAA RCRA	None None

Region II reported that inspection and enforcement activities were more efficient using a multi-media approach relative to an equivalent set of single media inspections. Region II took the lead on all FMECI inspections and enforcement actions (see Table 3). The Region noted an increased awareness of environmental compliance at facilities subjected to multi-media inspections and observed that these inspections provided environmental and command and/or management staff with an increased understanding of environmental regulations. The number of multi-media inspections and the number of administrative settlements have increased as a result of the FMECI. However, because the Region already includes multi-media inspections as part of its program, no additional interest in employing such inspections has been generated as a result of the FMECI.

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1994
None noted	N/A	N/A
Total Number of Actions with State Leads	0	0

POLLUTION PREVENTION

The Region did not include pollution prevention conditions or remedies in settlements resulting from the FMECI, but the Region is pursuing pollution prevention SEPs in settlement negotiations based on facility proposals and Regional/State initiatives. For example, final resolution of the proposed penalty assessed against Plum Island Research Center is likely to involve pollution prevention SEPs. The Region could not estimate the magnitude of additional reductions in pollutant emissions and discharges at Federal facilities due to pollution prevention/waste minimization efforts under the FMECI because the precise nature of such projects has not been determined. Region II did not find the pollution prevention opportunity profiles to be of any assistance, largely because they were based on out-dated information.

ADMINISTRATION, PROTOCOL, AND RESOURCES

When targeting facilities for inspection, the Region placed the greatest emphasis on compliance history and Regional risk ranking, with a moderate emphasis on relations to other priorities and opportunities for pollution prevention. The Region generated a list of potential

targets using these criteria, and made the final selections using a Multi-Program Enforcement Steering Committee, which includes representatives of each of the Region's enforcement programs. Thus, the concerns and interests of the individual programs were used to select facilities at which multi-media inspections were conducted. In addition, the pending closure of several bases in the Region was considered a factor by some programs.

Region II indicated that the States were not involved in targeting facilities for inspection. Although CFAs were not excluded when deciding which facilities to inspect, only two out of the top 20 facilities identified as candidates for multi-media inspections were CFAs. The majority of "environmentally significant" Federal facilities in Region II are Department of Defense facilities.

Region II did not request enforcement assistance from FFEO, RREL, or OCE. The Region did receive assistance from NEIC in investigating sumps and other discharges at the request of the Regional RCRA program. In addition, the Regional laboratory assisted by analyzing ground water samples collected for the RCRA Comprehensive Monitoring Evaluations (CME) conducted at Watervliet Arsenal and Picatinny Arsenal.

Prior to the FMECI, the Region was already conducting approximately 12 multi-media inspections per year, including one at a Federal facility. Because the Region already had allocated resources for multi-media inspections, the Region had only to shift them from inspections scheduled at one or two private sites to Federal facilities. The Region noted that multi-media inspections can place a burden on the facilities because they necessitate a rapid, unexpected rearrangement of facility staff schedules and priorities. Facilities are usually notified on Friday afternoon and most inspections begin on Monday morning. In addition, the coordination efforts required by staff from the Federal Facilities Compliance Program can be time-consuming.

Inspections conducted by Region II lasted approximately four days and usually involved a team of 10 people to conduct the inspection. The Region issued most administrative enforcement actions within one year. The Region typically began an inspection by conducting an in-briefing with the facility environmental coordinator and environmental staff, as well as the facility director/base commander if they asked to be included. The briefing was used to introduce inspectors and facility staff members, discuss the proposed inspection schedule, and explain EPA's multi-media compliance program and the goals and objectives of the inspection.

Region II provided personnel at inspected facilities with copies of the FMECI overview brochure and the Federal Facilities Compliance Strategy (Yellow Book) at the inspection in-briefing. To conclude an inspection, Region II held an out-briefing to discuss preliminary findings with facility staff. This approach helped foster a cooperative, rather than adversarial, atmosphere for the inspection and any resulting enforcement actions. Furthermore, the out-briefing notified facility personnel of potential violations that were discovered before the initiation of an enforcement action. The Region believes that this approach contributed to the relatively rapid correction of violations and close-out of enforcement actions at inspected

facilities, and has adopted it as standard Regional policy for both Federal and private site multi-media inspections.

REGIONAL/STATE COORDINATION

The level of interaction between Region II and its respective States and Territories was generally moderate during the targeting inspection, and enforcement phases. Five of the FY 1993 multi-media inspections included State environmental and/or health agency representatives. In addition, a county health department representative was involved in the development and settlement of an enforcement action. During FY 1994, no State representatives participated on multi-media inspections in Region II.

Region II noted no significant benefits resulting from EPA/State coordination at Federal facilities inspected under the FMECI. The Region cited limited State resources as the only obstacle to Regional/State coordination (see Table 4).

Table 4 Regional/State Coordination

Benefits To Increased Coordination

None reported

Obstacles To Increased Coordination

Limited State resources

Overall, the Region believes that SEAs have enhanced the ability of States to participate in the FMECI. Aside from the involvement of multiple programs, the individual media inspections do not differ greatly from standard Compliance Evaluation Inspections. Accordingly, the SEAs, which provide a framework for joint inspections, have facilitated coordination between Regional and State program staff. In addition, Region II observed that the overall relationship between the Regions and States had improved during the FMECI.

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Region II indicated several benefits and barriers to using the multi-media approach as opposed to a single-media approach. The multi-media inspections provided a comprehensive view of a facility's environmental compliance program that captured the attention of base commanders/facility managers and raised awareness of specific environmental programs and

facility problems. Through coordination of multi-media inspections, EPA was presented as a team that communicates with the facilities. As a result, the facilities' opinion of EPA as an enforcement organization and as a resource for compliance/environmental information improved. Moreover, Region II observed that multi-media inspections frequently involved assessments of facilities that had not recently been inspected or were not slated for inspection in the near future.

Region II indicated that the multi-media approach helped foster cooperative rather than adversarial relationships. The Region also suggested that the approach led to a faster return to compliance.

Region II experienced several barriers to utilizing the multi-media approach. One of the obstacles was the need for rapid, unexpected rearrangement of facility staff schedules and priorities. The coordination efforts required of the staff from the facilities were time-consuming. Additionally, delays often occurred in the transmittal of inspection reports to the facilities; all reports had to be completed in order to be sent in a single package.

The Region noted that most facility staff were fairly cooperative throughout the multi-media inspection process, including those who tended to be guarded at the outset. Is one instance, facility staff reacted positively to the prospect of a multi-media inspection because it meant that additional inspections by EPA would be less likely in the near future. In addition, facility personnel perceived the high visibility of multi-media inspections as useful for highlighting the success of their programs or gaining additional management attention, support, and funding for environmental concerns.

Table 5
Benefits/Barriers to Multi-Media Inspections

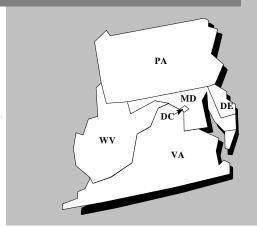
Benefits

- Provides comprehensive view of facility compliance programs
- Captures the attention of base commanders and facility directors
- Enhances facility perception of Region II as an enforcement organization and a resource or information source
- Results in inspection of facilities that might not otherwise be inspected
- Opens channel of communication between Region and facilities
- Helps foster a cooperative relationship
- Contributes to rapid correction of violations

Barriers

- Requires rapid, unexpected rearrangement of facility schedules and priorities
- Requires time-consuming effort to coordinate with facility staff
- Delays transmittal of inspection reports until the last one is complete





EPA Region III, with Headquarters in Philadelphia, Pennsylvania, consists of five States: Pennsylvania, Delaware, Maryland, West Virginia, and Virginia, and the District of Columbia. Although Region III routinely conducts Category A or B single-media inspections, it conducted six Category D multi-media inspections under the FMECI, four in FY 1993 and two in FY 1994. The Region classified the multi-media assessment of the White House Complex as a Category D inspection because of its scope, although technically it was an audit. Inspected facilities spanned the entire range of facility size and complexity of compliance issues.

COMPLIANCE/ENFORCEMENT

Region III issued 11 enforcement actions at four of six inspected facilities during the FMECI. Region III used a wide range of enforcement tools, including Administrative Orders, NOVs, NONs, and Field Citations (see Table 1).

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Notice of Violation	2	1
Administrative Order	6	
Notice of Noncompliance	1	
Field Citation	1	
Total Number of Actions	10	1

The Region III had a higher than usual level of enforcement activity in FY 1993. It is significant to note that the Aberdeen Proving Ground (APG) was subject to six enforcement actions: three RCRA §3008(a) Orders, two Administrative Orders (one for CWA violations and one for UST violations), and one NOV for TSCA violations. In addition, the Region sent APG a request for information letter asking for detailed SDWA/UIC data (no specific violation was cited). The Region assessed penalties against APG for nearly \$125,000 (see Table 2).

Dover Air Force Base was cited for two violations, a Field Citation for FIFRA violations and a NOV for RCRA violations (see Table 2). The Region cited Fort George G. Meade in Maryland for two violations: a NON for TSCA violations and an Administrative Order proposing a penalty in the amount of \$10,000 (see Table 2).

President Clinton invited EPA and the District of Columbia to conduct a multi-media audit of the White House Complex in FY 1993. EPA applied its environmental auditing policy, which states that while audit findings cannot be used as the sole basis for taking enforcement actions, if significant findings or violations are discovered, they must be submitted to EPA. The auditors provided the audit findings and recommendations to the White House Complex staff. The White House Complex was not subjected to any enforcement actions due to the audit.

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED		
FY 1993	FY 1993					
U.S. Army Aberdeen Proving Ground, MD	3 Administrative Orders Administrative Order Administrative Order	Issued Issued Issued	RCRA CWA UST	\$92,500 (F) \$25,000 and \$5,000 from State, SEP Negotiated None None		
	NOV	Issued	TSCA	None		
Dover Air Force Base, DE	Field Citation NOV	Issued Issued	FIFRA RCRA	None None		
Fort George G. Meade, MD	Administrative Order NON	Issued Issued	RCRA TSCA	\$10,000 (P) None		
White House Complex, DC	None	None	None	None		
FY 1994	FY 1994					
Indian Head Naval Surface Warfare Center, MD ⁶	NOV	Issued	CWA	None		
Fort Belvior, VA ⁷						

⁶ The multi-media inspection report for this facility has not been released as of the publication of this report, therefore the final disposition of enforcement activity at this facility is pending.

 $^{^{7}}$ The multi-media inspection report for this facility was completed in the summer of 1995 and is being analyzed by the Region.

Region III, the State of Delaware, the District of Columbia, and the NEIC participated as the inspection leads for the six inspections. Maryland participated in inspections of Aberdeen and Fort Meade; NEIC and the Region were the inspection leads for the Aberdeen and Fort Meade facilities, the Region and State of Delaware acted as inspection leads for Dover Air Force Base; and the Region and the District of Columbia served as the inspection leads for the White House audit.

States and other Federal agencies played an active role in enforcement at Federal facilities in Region III. As illustrated in Table 3, seven of 11 enforcement actions were led by the States. At APG, Maryland acted as the enforcement lead for UST and delegated RCRA violations, while Region III exercised the lead for non-delegated RCRA land disposal restriction violations and TSCA violations. In addition, the Army Corp of Engineers acted as the lead for CWA wetlands violations at APG. Delaware assumed the lead on all enforcement actions at Dover Air Force Base. At Fort Meade, Maryland acted as enforcement lead for violations of RCRA.

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTION	STATE LEADS FY 1993	STATE LEADS FY 1994
Field Citation	1	
Notice of Violation	1	
Administrative Order	5	
Total Number of Actions with State Lead	7	0

The Region explored multi-media enforcement opportunities but did not incorporate such opportunities when identifying violations or developing enforcement actions. Region III stated that the violations discovered have been fairly straightforward, single-media violations. However, Region III stated that it remains alert for this kind of opportunity.

Region III believes that the multi-media inspections resulted in both an increased awareness of compliance issues, as well as enhanced compliance at Federal facilities. The Region attributes this to the extraordinary attention the multi-media inspections have received from facility commanders and other top management. The Region also noted that most large facilities seem to expect multi-media inspections. In Region III, the FMECI did not change the number of administrative and multi-media settlements compared to the Region's Federal facility activities prior to FY 1993.

POLLUTION PREVENTION

The Region identified numerous site-specific pollution prevention opportunities in the inspection reports as a result of the FMECI. The Region typically described its recommendations in the inspection reports' discussion of areas of concern at the particular facility. Region III noted that pollution prevention provisions and SEPs were incorporated into settlements at some inspected facilities.

The Region indicated that as a result of the FMECI, a reduction in pollutant emissions and discharges at Federal facilities is likely. One mechanism that will be used to achieve this goal will be the pursuit of pollution prevention SEPs. For example, in response to a RCRA enforcement action, APG is participating in a SEP as well as paying associated penalties. Dover Air Force Base, had a pollution prevention plan in place at the time of the inspection, moreover, Dover Air Force Base personnel noted that task forces had been successful in identifying wastes for reduction and in implementing programs to achieve reductions.

The Region III inspection team made numerous recommendations to the White House complex as a result of the multi-media audit. For example, it recommended the development of a comprehensive White House Complex Pollution Prevention Plan. Specifically, it encouraged the consolidation of White House painting operations and the construction of a new painting facility. The team also recommended eliminating or reducing chemical use in maintenance operations, and implementing various water conservation activities.

The inspection teams presented a Pollution Prevention Opportunity Profile and FMECI Overview Brochures to each Federal facility at the time of inspection, helping to raise the awareness of facility managers.

ADMINISTRATION, PROTOCOL, AND RESOURCES

When targeting facilities for inspections, Region III considered compliance history and relationships to other priorities to be the most important criteria. Other less important targeting criteria included Regional risk ranking, and opportunities for pollution prevention. Another criterion included State assessments regarding which facilities would benefit most from the special attention associated with multi-media inspections. Region III recognized that this criterion was subjective, but considered it legitimate for consideration.

With the exception of the White House Complex, the FMECI targeting criteria led Region III to exclude CFA facilities from multi-media inspections because the history and operation of Region III's CFA facilities did not generally yield high scores.

When conducting the inspections, Region III did not seek assistance from the RREL of the OCE. It did, however, request assistance from NEIC to conduct the multi-media inspections and write reports for Fort G. Meade and APG. Region III considers this working relationship to be very positive. States also have been another source of assistance to the Region, as were members of FFEO staff who participated in in-briefing activities during two multi-media inspections.

Region III indicated that the allocation of resources needed to meet the FMECI's requirements significantly impacted the availability of resources for other Regional and State enforcement priorities. When the Region, instead of NEIC, staffed the inspections, the Region frequently heard that it was "stealing from other (non-Federal) cases" to participate in the FMECI. The Region noted a concern that once the FMECI ended, coordination and participation with the States might diminish as a result of resource constraints.

Region III and States used large inspection teams relative to the other EPA Regions. On average, 19 participants were involved in each inspection. Inspections generally lasted more than seven days. The Region noted that the considerable time required to develop FMECI inspection reports may have constrained its capability to perform more inspections. The Region also noted that the time elapsed between the inspection and receipt of the inspection report by enforcement staff interfered with the Region's ability to finalize administrative enforcement cases within the one-year time frame established under the FMECI. In addition, because Region III encouraged States to take the lead on many enforcement actions, the Region had to wait for completion of the State enforcement process before it took any action.

Region III gave facilities a three working day notice of inspection. Inspectors held opening and closing briefings for one of four facilities in which they discussed inspection objectives, logistics, and results. The White House inspection involved several brief pre-audit tours and meetings to review background information and to discuss efficient audit methods for the facility.

During the Fort Meade inspection, access to some National Security Agency locations was restricted. The Region, however, chose not to follow up with an additional site visit, due to the low environmental significance of the restricted sites.

REGIONAL/STATE COORDINATION

Overall, the Region reported a moderate to significant level of coordination with Delaware, Maryland, and the District of Columbia. The Region involved them in every phase of the FMECI activities, including targeting, inspections, and enforcement. A moderate level of interaction occurred during the targeting stage and a significant level of coordination occurred

during inspections and enforcement. The Region noted that SEAs apparently have not enhanced or impaired States' ability to participate in the FMECI. The Region has not entered into SEAs for many years and, instead, relies primarily on grant agreements and informal coordination with each program.

Region III noted two benefits from Regional and State coordination as a result of the FMECI. The Region noted that at the management and inspector levels, interaction with the States was effective and generally helpful in team building. In some cases, this was the first time State inspectors were involved in multi-media inspections (see Table 4). State inspectors viewed the inspections as an important learning experience.

Table 4 Regional/State Coordination

Benefits To Increased Coordination

- Interaction is effective and helpful in team building
- State inspectors viewed FMECI as learning experience

Obstacles To Increased Coordination

• Extra time required by State to make enforcement decisions

The Region reported one coordination obstacle: the extra time States occasionally required to decide on an enforcement action. Region III commented, however, that this is not unique to the FMECI. The Region also noted that different enforcement philosophies exercised by the States and the Region could present barriers to multi-media inspections. The Region cited as examples the disparity between the EPA and State penalty assessments for APG in Maryland, and the State's mild enforcement action at Dover Air Force Base.

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

According to Region III, the multi-media inspections have had a significant impact on the overall environmental performance at the facilities. Region III found the facilities to be cooperative, except for a few minor access problems. In fact, facility environmental offices welcomed the inspections as an opportunity to demonstrate the importance of environmental compliance to upper level management and commanders.

Region III reported increased interest in using multi-media inspections because it was a good experience, especially because it expanded inspector expertise and allowed Regional inspectors to work with State inspection teams. Another benefit from using multi-media inspections, as opposed to single-media inspections, was the greater impact multi-media

inspection had on facilities. The FMECI also provided Region III facilities with a benchmark for assessing performance (see Table 5).

Table 5
Benefits/Barriers to Multi-Media Inspections

Benefits

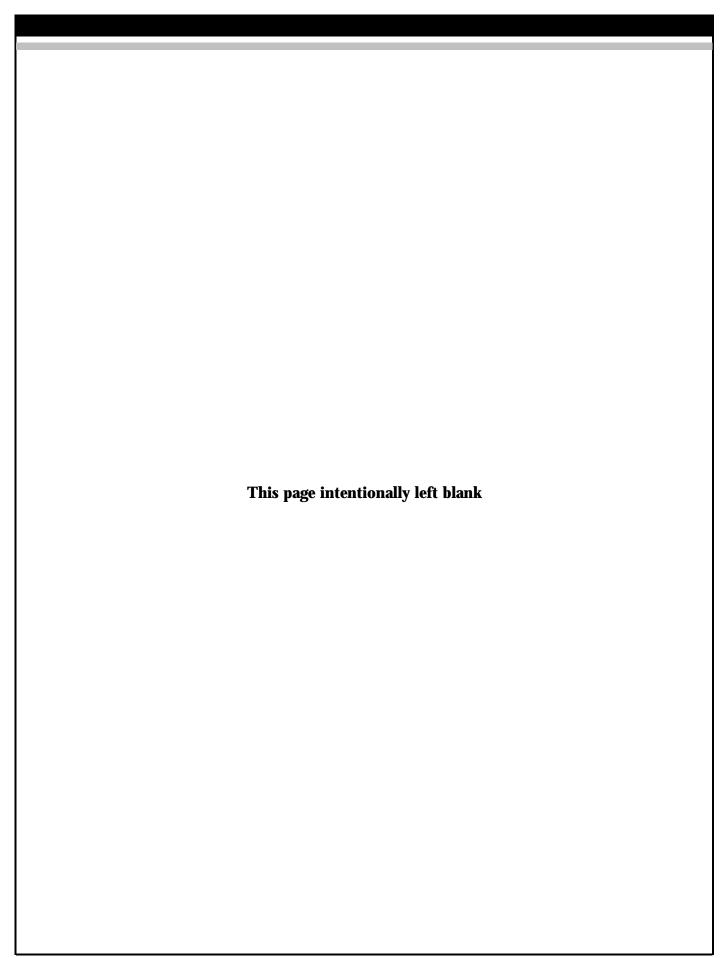
- Allows for a greater impact on facilities
- Provides a benchmark for assessing performance
- Permits discovery of related problems that might be the root causes of compliance and pollution prevention deficiencies
- Provides a learning experience for Region and State inspectors
- Expands inspectors' expertise
- Provides a good working experience with State inspection team

Barriers

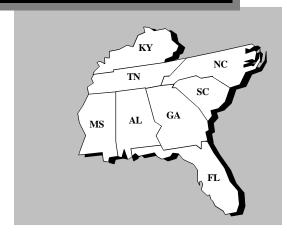
- High level of effort required
- Greater travel costs
- Many people required to provide input for reports
- Resource commitment too high for more than a small number of inspections

Region III also noted barriers to multi-media inspections, including the major effort required by EPA and the States to conduct the inspections, and the greater travel costs involved. Both barriers made it difficult for Region III to obtain commitments to staff the inspections. This, in turn, limited the number of multi-media inspections the Region could conduct. In addition, it took longer to write the inspection reports because many people had to provide information to the team leader. The resource commitments prohibited the Region from conducting more than six multi-media inspections.

Region III also indicated that more national publicity about the FMECI might help the overall effort because it would place Federal facility compliance in a national context.



Region IV



EPA Region IV, with Headquarters in Atlanta, Georgia, consists of eight Southeastern States: Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, and Florida. Together, Region IV and the States conducted more multi-media inspections under the FMECI than any other Region. Region IV conducted 21 Category C multi-media inspections, 12 in FY 1993 and nine in FY 1994. Most of the facilities inspected were medium-sized, although nine were large. The inspected facilities posed the full range of compliance issue complexity.

COMPLIANCE/ENFORCEMENT

Region IV completed 26 enforcement actions at 13 of the 21 inspected facilities. The majority of these enforcement actions were warning letters (19), along with six NOVs, and one Administrative Order (see Table 1). The Administrative Order to address RCRA violations at Air Force Plant #6 also involved proposed penalties in excess of one-quarter of a million dollars and final penalties of \$75,000.

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Warning Letter	10	9
Notice of Violation	3	3
Administrative Order	1	
Total Number of Actions	14	12

Warning Letters were distributed fairly evenly among CAA, RCRA, CWA, and SDWA violations, with the exception of one SPCC violation. The NOVs were issued for CWA, CAA and RCRA (see Table 2).

Table 2 Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED			
FY 1993							
Air Force Plant #6, GA	2 Warning Letters Administrative Order	Issued Issued	CAA, CWA RCRA	None \$285,000(P) \$75,000(F)*			
U.S. Army Redstone Arsenal, AL	NOV	Issued	RCRA	None			
NASA Marshall Space Flight Center, AL	None	None	None	None			
U.S. Naval Air Station, Key West, FL	3 Warning Letters	Issued	CAA, CWA, SPCC	None			
U.S. Marine Corps Logistics Base, GA	2 Warning Letters	Issued	RCRA, CAA	None			
Pope Air Force Base, NC	NOV Warning Letter	Issued Issued	CAA CWA	None None			
Seymour Johnson Air Force Base, NC	Warning Letter	Issued	CAA	None			
MacDill Air Force Base, FL	None	None	None	None			
U.S. Army Armor & Fort Knox, KY	NOV Warning Letter	Issued Issued	CAA RCRA	None None			
Charleston Air Force Base, SC	None	None	None	None			
U.S. Marine Corps Recruit Depot, SC	None	None	None	None			
U.S. Army Fort Bragg, NC	None	None	None	None			
FY 1994							
Pensacola Naval Air Station, FL	NOV 2 Warning Letters	Issued Issued	CWA RCRA, SDWA	None None			
Fort Stewart, GA	3 Warning Letters	Issued	CAA, CWA,	None			
	NOV	Issued	SDWA RCRA	None			

^{*} Includes pollution prevention plan as condition of settlement.

Table 2 (Cont.) Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE VIOLATED	PENALTIES ISSUED
Keesler Air Force Base, MS	None	None	None	None
NASA Stennis Space Flight Center, MS	None	None	None	None
Fort Rucker, AL	Warning Letter	Issued	RCRA	None
Tyndall Air Force Base, FL	None	None	None	None
Naval Coastal Systems, FL	None	None	None	None
Hunter Army Airfield, GA	Warning Letter NOV	Issued Issued	CAA RCRA	None None
Fort Jackson, SC	2 Warning Letters	Issued	SDWA, RCRA	None

Region IV noted that both environmental compliance, and awareness of compliance at Federal facilities have been enhanced as a result of the multi-media inspections under the FMECI. The number of administrative settlements and multi-media inspections in Region IV increased due to the FMECI. In addition, the Region noted that every aspect of the multi-media enforcement and compliance process, from preparation and inspection to report writing and enforcement, was at least as or more efficient than conducting equivalent sets of single media inspections. The Region was able to finalize its administrative enforcement cases within the one-year time frame established under the FMECI guidelines.

Representatives from all of the affected States in Region IV participated on multi-media inspection teams under the FMECI. Moreover, on all but four of the multi-media inspections, the States took a lead role on at least one program component (e.g., RCRA, CWA). States also took an active role during the enforcement process. In total, the States took the lead for eight enforcement actions in FY 1993 and six actions in FY 1994 (see Table 3). This represents more than half of all enforcement actions taken in the Region during the FMECI.

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1994	
Warning Letter	4	4	
Administrative Order	1	-	
Notice of Violation	3	2	
Total Number of Actions with State Lead	8	6	

Region IV did not take any multi-media enforcement actions during the FMECI; however, the Region maintained that it evaluated the feasibility of such enforcement opportunities when identifying violations and devising enforcement actions.

POLLUTION PREVENTION

Each inspection report documented pollution prevention opportunities and contained discrete recommendations. The Regional reports also noted facilities with successful pollution prevention programs and identified additional opportunities. Region IV also provided many of the facilities with pollution prevention resources and/or guidance, such as Pollution Prevention Opportunity Profiles. The Region found the Profiles to be particularly useful to the inspection teams during both the inspections and exit briefings.

In FY 1993, Region IV incorporated pollution prevention conditions or remedies into settlements as a result of the FMECI. For example, Air Force Plant #6 was required to submit a pollution prevention action plan, setting forth actions and dates for reduction of pollutants, as part of the enforcement action. Air Force Plant #6 submitted a formal pollution plan to Georgia as a result of FMECI. The plan was discussed and approved by Georgia. The Region anticipates a reduction in pollutant emissions and discharges as a result of these and similar activities.

Region IV did not attempt to incorporate pollution prevention conditions or remedies into settlements in FY 1994, nor did it pursue any pollution prevention SEPs. According to the Region, most enforcement actions beyond Warning Letters are taken by the States, and most States are requiring facilities to develop and implement pollution prevention plans.

ADMINISTRATION, PROTOCOL, AND RESOURCES

When selecting facilities for inspection, Region IV considered compliance history and Regional risk ranking to be very important. The relationship to other National, Regional, or State priorities was considered moderately important, while opportunities for pollution prevention were only slightly important to the inspection targeting process. The Region did not use environmental justice as a targeting criteria, primarily because a lack of clearly definable data made it difficult to understand how it could be used effectively. Region IV also considered the dates of the previous multi-media inspections and the number of facilities within a particular group (e.g., Navy, Air Force) that had been inspected.

During FY 1993, Region IV did not deliberately exclude CFAs from the list of facilities to be inspected, but most CFAs did not rank sufficiently high on their priority list. Therefore, only one CFA (NASA Marshall Space Flight Center) was inspected. In FY 1994, the Region stated that CFAs were targeted; however, only one CFA (NASA Stennis Space Flight Center) received a multi-media inspection.

The Region reported that the number of multi-media inspections conducted in Region IV increased due to the FMECI, although the number of administrative settlements at Federal facilities remained constant relative to pre-FY 1993 levels.

Region IV did not seek assistance from NEIC, RREL, or OCE; the Region did receive pollution prevention materials from FFEO, as well as technical assistance on wastewater issues from the EPA laboratory in Athens, Georgia. When conducting inspections, the Region provided each Federal facility with the FMECI overview brochures and the names of inspectors and Regional coordinators.

Region IV indicated that there was no adverse impact resulting from the specific allocation of Regional resources needed to meet the FMECI's requirements, because the Region took special steps to ensure the availability of resources. Region IV coordinated inspection activities to ensure that the inspections to fit within the normal inspection program. Inspections, on the average, lasted two days, and involved an average of eight inspectors. In almost all cases, the Region gave the facilities two days prior notice of the inspection. At the beginning of the inspections, an in-briefing was held. In addition, in roughly half of the inspections, the Region held an out-briefing. The Region noted that inspection personnel experienced no difficulties related to national security access.

REGIONAL/STATE COORDINATION

Overall, Region IV and the States experienced moderate to significant interaction during the FMECI, particularly during the inspection and enforcement phases. More than three-fourths

(17 out of 21) of inspections included State representatives as part of the inspection team. Region IV noted that the States want to protect their position in leading inspections and enforcement actions. Region IV did joint and overview inspections when State inspectors were involved.

Region IV noted that increased coordination with and involvement by the States enhanced the Region/State relationship and resulted in a limited exchange of regulatory knowledge (see Table 4). However, the Region noted that scheduling remains an obstacle to Regional and State coordination in multi-media inspections.

Table 4 Regional/State Coordination

Benefits To Increased Coordination

- Improved Regional/State relationships
- Exchange of regulatory knowledge

Obstacles To Increased Coordination

Scheduling

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Region IV noted that the multi-media inspections have received positive attention from facility commanders and environmental staffs. Several benefits and barriers to using the multi-media inspection were identified by Region IV. One benefit was the building of the Region and State relationships. The Region concluded that Federal facilities generally benefit from combined inspections by State and Federal regulators who comprehensively assess the environmental status of the facility. Region IV also indicated that multi-media inspections are a more efficient use of resources and cost less than single-media inspections.

On the other hand, Region IV noted that difficulties in coordinating efforts has been a barrier to the use of multi-media inspections. Region IV stated that every program prefers to perform its own inspections and take their own enforcement actions. Thus, to implement the FMECI, Region IV developed a cross-trained core team that can conduct or lead multi-media inspections.

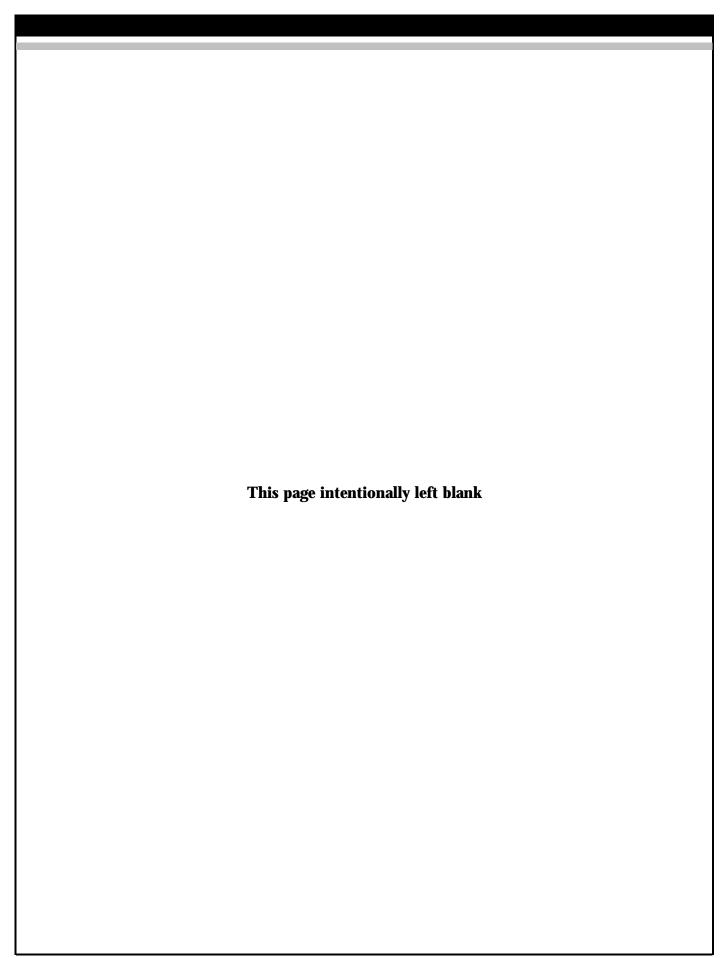
Table 5 Benefits/Barriers to Multi-Media Inspections

Benefits

- Encourages Regional/State relationship building
- Costs less than single-media inspections
- Gets more attention from base commanders
- Provides facilities with a complete evaluation of environmental compliance status

Barriers

- Requires demanding coordination
- Takes more time to prepare final report





EPA Region V, with Headquarters in Chicago, Illinois, consists of six States in the Midwest: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Only Illinois and Ohio participated in the multi-media inspections. This Region conducted two Category D multi-media inspections in FY 1993, and one Category D inspection in FY 1994. All inspected facilities were classified as large and the level of complexity of compliance issues ranged from medium to high.

COMPLIANCE/ENFORCEMENT

As a result of three multi-media inspections, Region V identified many potential violations of environmental requirements and issued an Administrative Order, a single media NOV, and a NOV addressing violations of four separate statutes (see Table 1).

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Administrative Order	1	
NOV ⁸	4	1
Total Number of Actions	5	1

As shown in Table 2, Region V issued an Administrative Order to Wright-Patterson Air Force Base for RCRA violations and a multi-media enforcement settlement (a NOV for violations of numerous environmental statutes). The Administrative Order involved a proposed penalty of \$102,400, and was eventually settled for \$60,200. Region V's inspection of Argonne National Laboratory identified numerous areas of concern but only found clear violations of the

 $^{^{8}}$ The NOV in FY 1993 addressed violations of four separate statutes, therefore, it represents four enforcement actions.

CWA. According to the Region, recent improvements in the facility's CWA compliance status make it unclear as to what benefits would be achieved by proceeding with formal enforcement actions. In FY 1994, the Region cited the U.S. Army Lima Tank Plant for RCRA violations.

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED
FY 1993				
Argonne National Laboratory, IL	None	None	None	None
Wright-Patterson Air Force Base, OH	NOV	Issued	CAA, CWA, FIFRA, TSCA	None
	Administrative Order	Issued	RCRA	\$102,400 (P) \$60,200 (F)
FY 1994				
U.S. Army Lima Tank Plant, OH	NOV	Issued	RCRA	None

Region V took the lead in the inspections at Argonne National Laboratory, while NEIC took the inspection leads for Wright-Patterson Air Force Base and the U.S. Army Lima Tank Plant. States in Region V did not take a lead role on any enforcement actions taken as a result of the FMECI in FY 1993 or FY 1994 (see Table 3).

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1994
None noted	NA	NA
Total Number of Actions with State Lead	0	0

POLLUTION PREVENTION

Based on input from inspections conducted prior to FMECI inspections, Wright-Patterson Air Force Base implemented pollution prevention measures, such as anti-freeze

recycling and substitution of citrus-based degreasers for chlorinated solvents degreasers, by the time of the FMECI-related inspection. A Pollution Prevention Opportunity Profile was provided to the Base at the time of inspection. The inspection also identified several opportunities for additional pollution prevention activities opportunities that would address compliance issues.

The inspection report for Argonne National Laboratory indicated that a well-established waste minimization program is operational at the facility. Through this program, Argonne monitors chemical inventory, recycles many of the chemical by-products, and recycles 95 percent of its solid waste on-site. According to the Region, due to the complexity of the facility and the comprehensive nature of the pollution prevention program, the inspectors did not attempt to identify additional pollution prevention opportunities.

Region V did not state if it projects any reductions in pollutant emissions or discharges at the Federal facilities within its jurisdiction. Also, Region V did not clarify if it incorporated pollution prevention opportunities or remedies into settlements; but Region V will pursue SEPs as appropriate.

ADMINISTRATION, PROTOCOL, AND RESOURCES

Region V selected facilities to participate in the multi-media inspections based on all five criteria specified in the FMECI guidance (i.e. compliance history, risk ranking, other priorities, pollution prevention, and environmental justice); however, the Region did not indicate the relative significance of the criteria in the targeting process. Region V did not specifically exclude CFA facilities, but determined that none were as high of a priority as DOD or DOE facilities. Region V sought assistance from NEIC. NEIC has participated as the inspection lead at two facilities.

Region V did not give Argonne National Laboratory notice prior to conducting the inspection. Because of the size and scope of the Argonne facility, more than one visit, over the span of four days, was necessary to complete the inspection. Furthermore, because of the time of year, one coal-fired boiler believed to have a history of opacity problems, was not in operation. Region V took visible emissions readings from the boiler in March of 1994 and found no opacity when it was in operation. Therefore the Region had no basis for bringing an enforcement action under the CAA.

The size of Wright-Patterson Air Force Base also necessitated a multi-day inspection, which was held over 12 days. Region V and the Ohio Environmental Protection Agency combined efforts in the inspection. The facility required inspection personnel to attend a two-hour orientation and safety training session, which, because the inspection was unannounced was held on the second day. Region V did not meet the one-year time frame for completing enforcement actions.

REGIONAL/STATE COORDINATION

Region V did not describe the level of interaction between the States and Region during the stages of the FMECI. However, the Region indicated that States played a particularly useful role in the inspection of Argonne National Laboratory's public water supply system.

Region V observed that increased coordination led to more thorough inspections, however they did require additional effort and resources (see Table 4).

Table 4 Regional/State Coordination

Benefits To Increased Coordination

More thorough and complete inspections

Obstacles To Increased Coordination

Additional effort and resources required

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Region V observed that multi-media inspections provide more comprehensive facility reviews than single-media inspections and also serve as a strong expression of EPA's commitment to improve environmental compliance at Federal facilities. Region V reported that Federal facilities were reasonably cooperative during the inspections.

Table 5 Benefits/Barriers to Multi-Media Inspections

Benefits

- Provides comprehensive facility reviews
- Provides a concrete expression of the seriousness the EPA attaches to environmental compliance at Federal facilities

Barriers

None cited



EPA Region VI, with its headquarters in Dallas, Texas, consists of five States: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. Region VI, together with the individual State agencies, inspected five Federal facilities as part of FMECI, three in FY 1993 and two in FY 1994. Each multi-media inspection involved some State participation. Four of five facilities received Category D multi-media inspections, while one received a Category C inspection. All inspected facilities were classified as large in size and posed medium to high complexity levels of compliance issues.

COMPLIANCE/ENFORCEMENT

Three inspected facilities in Region VI were the subject of five enforcement actions during the FMECI. Four of five actions were taken during FY 1993 (see Table 1).

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Warning Letter	2	
Notice of Noncompliance		1
Notice of Violation	1	
Administrative Order	1	
Total Number of Actions	4	1

Region VI identified violations of RCRA, CWA, CAA, and SDWA (see Table 2). The Region sent a warning letter to Air Force Plant #3 for RCRA violations and is awaiting a response from the facility. The Region also issued an Administrative Order for CWA (NPDES) violations to the University of California contractor-operator at Los Alamos National Laboratory (LANL). A State warning letter also was sent to LANL for SDWA violations. A State NOV was issued to Kelly Air Force Base for CAA violations. No penalties were assessed in connection with any violations or enforcement actions for the inspected facilities in Region VI.

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED
FY 1993				
Kelly Air Force Base,TX	NOV	Issued	CAA	None
Air Force Plant #3, OK	Warning Letter	Issued	RCRA	None
Los Alamos National Laboratory, NM	Administrative Order Warning Letter	Issued Issued	CWA SDWA	None None
FY 1994				
Fort Bliss, TX	NON	Issued	TSCA	None
NASA Michoud Assembly Facility, LA ⁹				

States in Region VI participated in all inspections under the FMECI. The Region was the inspection lead for Kelly Air Force Base. At Los Alamos National Laboratory, NEIC acted as the inspection lead for all statutes except SDWA, for which Region VI and the State of New Mexico shared the lead. At Air Force Plant #3, the Region acted as lead inspector for all statutes except SDWA, which was led by the State of Oklahoma.

In terms of enforcement, the Region has acted as the enforcement lead for actions taken during FY 1993 to address RCRA violations at Air Force Plant #3 and CWA violations at LANL (see Table 3). Two enforcement actions, for SDWA violations at LANL and CAA violations at Kelly AFB, involved State lead.

⁹Multi-Media Inspection Report is currently under review.

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1994	STATE LEADS FY 1994
Warning Letter	1	
Notice of Violation	1	
Total Number of Actions with State Lead	2	0

Region VI inspectors explored multi-media enforcement opportunities while on-site through daily planning coordination meetings and through coordinated unit-specific inspections by all applicable single media inspectors.

The Region noted that discussions with the environmental staff during the inspections and during out-briefings with facility management enhanced environmental compliance and awareness of compliance issues at the inspected facilities. Region VI also noted, however, that any regulatory presence tends to improve awareness, thus any increased awareness cannot be attributed solely to the multi-media inspection approach. Region VI believes that the Air Force and DOE have incorporated environmental structures that assist individual facilities in dealing with environmental compliance issues.

Region VI stated that multi-media inspections continue to be a high-priority program element. The Region also noted that it conducted more multi-media inspections at Federal facilities under the FMECI than it conducted prior to FY 1993. There has been no change in Region VI in the number of administrative settlements as a result of the FMECI. The Region also observed that multi-media inspections are often more ponderous than equivalent sets of single media inspections, particularly from the inspected facility's perspective.

POLLUTION PREVENTION

Region VI inspectors identified some pollution prevention opportunities. For example, at Air Force Plant #3, the inspectors discovered a waste minimization plan in place, albeit an informal one, about which an employee was able to elaborate. Region VI also provided a Pollution Prevention Opportunity Profile on LANL to the NEIC for relay to the facility. The Region is not presently pursuing pollution prevention SEPs with any of the facilities inspected under the FMECI, nor is it attempting to incorporate pollution prevention conditions or remedies into enforcement settlements. The Region noted that opportunities for such conditions, remedies, or SEPs simply had not yet arisen.

Region VI did not project any reductions in pollutant emissions and discharges at Federal facilities within its jurisdiction based upon its efforts in waste minimization, pollution prevention, and negotiation of SEPs.

ADMINISTRATION, PROTOCOL, AND RESOURCES

Region VI selected facilities for inspection based primarily on the criteria in the FMECI Implementation Guidance. The Region ranked compliance history, Regional risk ranking, and relationships to other priorities as being very important, while it ranked opportunities for pollution prevention and environmental justice as moderately important. The Region reported that CFA facilities were not excluded from its list of targeted facilities as a result of the application of the targeting criteria, and in fact, two out of five facilities inspected under the FMECI in Region VI were CFAs.

Region VI did not seek assistance from FFEO, RREL, or OCE with respect to enforcement actions under the FMECI. NEIC helped Region VI by acting as the inspection lead for the Los Alamos National Laboratory and assisting in the preparation of the final inspection report. Region VI stated that cooperation from NEIC has always been available when requested.

Region VI indicated that the specific allocation of resources to meet the FMECI requirements did not have a significant impact on the availability of resources for other Regional and State enforcement priorities. To help ensure that this would be the case, most of the Region's media programs set aside a percentage of inspection resources for Federal facilities at the beginning of FY 1993.

On average, seven people participated on the multi-media inspection teams, with the largest and smallest teams consisting of 11 and four, respectively. The inspections lasted between two and 11 days, with an average length of seven days. At least one inspector noted in the inspection report that the two-day inspection was not enough time to observe all of the facility's operations. Region VI indicated that the task of collecting and compiling the inspection report information was "resource-intensive" and "took longer than anticipated."

Overall, the inspectors had positive experiences at the facilities. Only one inspector from the State of New Mexico experienced minor difficulties concerning facility access while conducting an inspection. The inspector was initially denied entry into a technical area at the Los Alamos National Laboratory because the inspector lacked security clearance. EPA inspectors proceeded with the inspection. Region VI conducted opening and closing briefings for all the inspected facilities. The Region did not provide advance notice to any of the facilities prior to conducting the inspections.

REGIONAL/STATE COORDINATION

The Region concluded that, overall, interaction between Region VI and the States in connection with the FMECI occurred at a moderate level. Region VI indicated that State Enforcement Agreements, particularly with respect to RCRA enforcement actions, served as an outline for future Regional/State interaction, thereby enhancing State participation in the FMECI.

In FY 1993, Region VI reported no significant obstacles to Regional and State coordination (see Table 4). On the other hand, Region VI suggested that the three-way understanding and cooperation between the State, EPA, and a Federal facility is a benefit of the multi-media inspection and should be promoted. In addition, according to Region VI, the FMECI has not resulted in any negative ramifications for Regional and State relations.

Region VI noted that between FY 1993 and FY 1994 of the FMECI, communications, coordination of inspections and enforcement actions, and the overall relationship between the States and the Region improved substantially.

Table 4 Regional/State Coordination

Benefits To Increased Coordination

Increases understanding and cooperation between State, Region, and Federal facilities

Obstacles To Increased Coordination

None reported

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Region VI is positive about using multi-media inspections. Region VI reported many benefits and no barriers to the use of the multi-media inspections as opposed to single-media inspections (see Table 5). Region VI found the facilities to be cooperative during the inspections. Region VI suggested that one benefit of the multi-media approach was the additional expertise provided by other team members. This sharing of expertise and knowledge was particularly helpful to less experienced inspectors. Region VI noted an increased interest in utilizing multi-media inspections as a result of the experience with the FMECI. Region VI expects the use of multi-media inspections to increase in the future because it perceives the inspections as an effective enforcement tool and as a natural extension of multi-media inspections in the private sector.

Table 5 Benefits/Barriers to Multi-Media Inspections

Benefits

- Facilities cooperative
- Enhanced multi-media exposure among the inspection team members
- Team members provided additional knowledge and expertise
- Sharing of expertise helped less experienced inspectors

Barriers

None reported



EPA Region VII, with Headquarters in Kansas City, Kansas, is comprised of four States: Nebraska, Iowa, Kansas, and Missouri. Every State in the Region participated in the FMECI. Region VII reported that it usually conducts Category B or C inspections, but of the four Federal facilities inspected, two in both FY 1993 and FY 1994, half received Category D inspections. The sizes of the inspected facilities ranged from medium to large, and the complexity of compliance issues faced ranged from low to high.

COMPLIANCE/ENFORCEMENT

Region VII issued five enforcement actions at three facilities (see Table 1), including two NOVs and three NONs. At the U.S. Penitentiary in Levenworth, KS, a NON, and a NOV were issued for violations and potential violations of TSCA and RCRA, respectively; while at Hruska Meat Animal Research Center, inspectors issued an NOV for violations of RCRA/CERCLA. Both facilities promptly corrected the violations so no further action was necessary (see Table 2). Violations of EPCRA and TSCA at the Iowa Army Ammunition Plant were also resolved soon after issuance of two NONs.

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	S FY 1993	
Notice of Noncompliance	1	2
Notice of Violation	2	
Total Number of Actions	3	2

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED
FY 1993				
U.S. Penitentiary Levenworth, KS	NON NOV	Issued Issued	TSCA RCRA	None None
USDA Roman L. Hruska Meat Animal Research Center,NE	NOV	Issued	RCRA/ CERCLA	None
FY 1994				
Iowa Army Ammunition Plant, IA	NON NON	Issued Issued	EPCRA TSCA	None None
VA Medical Center, MO	None	None	None	None

Region VII did not levy penalties in connection with the violations or enforcement actions. RCRA and TSCA were cited most frequently, with four of the five enforcement actions occurring under these statutes. The Region acted as the inspection lead for both facilities inspected in FY 1993 and the Veterans Affairs Medical Center, MO in FY 1994. NEIC acted as inspection lead for the Iowa Army Ammunition Plant. The States did not take the lead on any enforcement actions taken under the FMECI in Region VII (see Table 3).

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1993
None noted	N/A	N/A
Total Number of Actions with State Lead	0	0

Region VII reported an increased level of environmental compliance and awareness of compliance at the facilities that were inspected, as well as at other potential target facilities. Region VII did not take any multi-media enforcement actions as a result of the FMECI in either FY 1993 or FY 1994. Relative to equivalent sets of single media inspections, Region VII reported that multi-media inspections were slightly less efficient with respect to preparation, inspection, report writing, and enforcement.

POLLUTION PREVENTION

Region VII stated that it did not pursue pollution prevention SEPs as part of the FMECI, nor has it presently incorporated pollution prevention conditions or remedies into FMECI enforcement settlements. Region VII stated that it will use SEPs, if applicable, in the future.

Inspectors provided a Pollution Prevention Opportunity Profile to both facilities during the FY 1994 inspections. In general, the Region thought the profiles provided limited assistance throughout the multi-media inspection process.

One inspection team noted that the facility made an effort to implement pollution prevention techniques in several operations. The inspection team recommended that the facility coordinate pollution prevention activities through a central office and develop a comprehensive pollution prevention strategy. For another facility, pollution prevention recommendations were noted throughout the inspection report. For example, the inspection team suggested stricter control of the purchase of laboratory reagents.

ADMINISTRATION, PROTOCOL, AND RESOURCES

When targeting Federal facilities for multi-media inspections, Region VII considered factors such as compliance history, and the relationship to other national, Regional, or State priorities to be very important. Regional risk ranking, opportunities for pollution prevention, and environmental justice were only slightly important to the inspection targeting process. As a result of the targeting criteria, CFA facilities were not excluded from Region VII's target list, in fact, Region VII explicitly targeted CFAs. Three of the four facilities inspected under the FMECI in Region VII were CFAs.

During the multi-media inspections, the Region provided each facility with a FMECI Overview Brochure. Region VII provided other information to the facilities, including a pollution prevention check list and a follow-up call for assistance. Region VII sought assistance from NEIC during the FMECI.

Region VII reported that the allocation of resources needed to meet the FMECI's requirements significantly affected the availability of resources for other Regional/State enforcement priorities. The Region indicated that multi-media inspections were resource intensive and directly competed with single-media inspection resources. On average, inspection teams consisted of nine people and most inspections lasted two days.

Region VII conducted opening and closing briefings for all four facilities. The U.S. Penitentiary at Levenworth, KS, received notice of the inspection the previous afternoon.

Notice was necessary because security checks were required and because there was a need to minimize potential delays. The Region reported that it did not experience difficulties regarding national security or facility access while performing the inspections.

REGIONAL/STATE COORDINATION

Region VII reported a moderate level of general interaction and coordination with the States as a result of the FMECI. State representatives participated in the inspection teams for both FY 1993 multi-media inspections, and on one of two FY 1994 inspections. Region VII indicated that the level of interaction with the State increased throughout the stages of the FMECI. During the targeting phase, interaction did not exist, while a moderate level of interaction occurred during the inspection and enforcement stages.

Region VII indicated the State Enforcement Agreements (SEAs) enhanced the States' ability to participate in the FMECI. The Region noted that SEAs now include the multi-media concept. Region VII observed that the relationship between the States and the Region had not changed significantly as a result of the FMECI.

Region VII reported several obstacles to, and benefits from, Regional and State coordination. Obstacles to coordination included scheduling and identifying appropriate participants. The Region indicated that the benefits of Regional and State activities included enhanced cooperation, and training opportunities for both the Region and State. Although Region VII indicated that the FMECI resulted in no negative impacts regarding Regional/State relations the Region noted that the States lacked the resources to implement these efforts.

Table 4 Regional/State Coordination

Benefits To Increased Coordination

- Increases thoroughness of inspections
- Enhances cooperation with States
- Provides training opportunities

Obstacles To Increased Coordination

- Requires complex scheduling
- Necessitates early identification of inspection team participants
- Requires use of limited State resources

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

In general, Region VII found the Federal facilities cooperative during the multi-media inspections. Region VII identified many benefits from, and barriers to, using the multi-media approach (see Table 5). One benefit reported by Region VII was that the holistic, coordinated effort resulted in a comprehensive review of facilities. In addition, the multi-media approach enhanced awareness of regulatory requirements, improved coordination among Regional enforcement personnel, provided on-the-job training for inspectors, and promoted compliance among Federal facilities. On the other hand, the Region viewed the time and effort needed to coordinate the inspection and enforcement efforts as barriers to utilizing a multi-media approach. Some facility representatives found the multi-media approach to be overwhelming, and the Region observed numerous complexities associated with cross-program coordination.

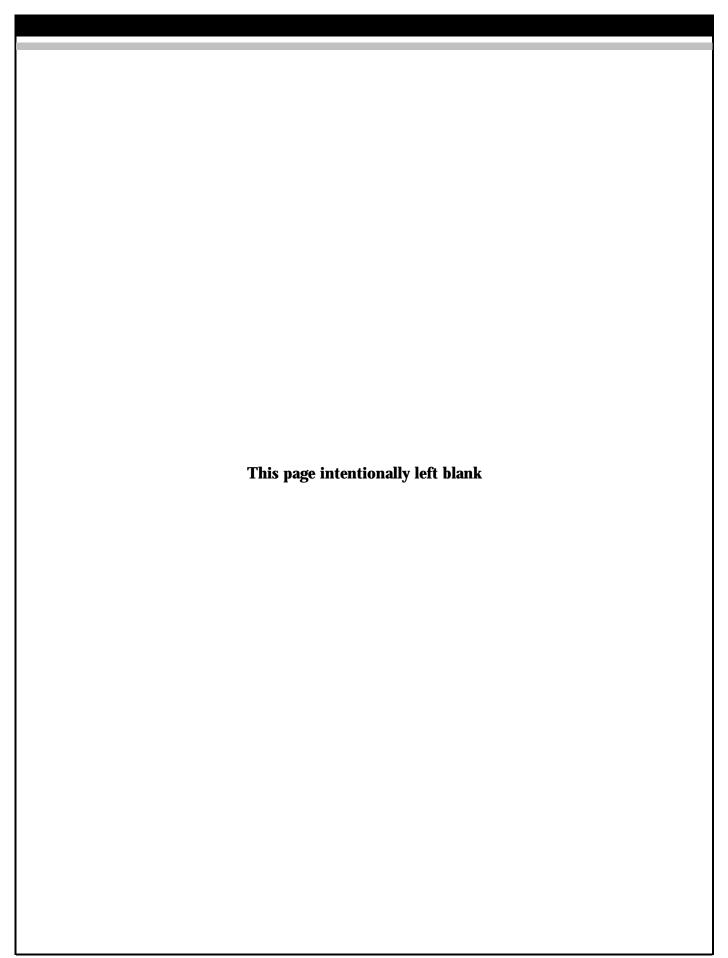
Table 5 Benefits/Barriers to Multi-Media Inspections

Benefits

- Enables a comprehensive review of facilities due to holistic approach
- Provides enhanced regulatory presence at Federal facilities
- Improves coordination among Regional enforcement staff
- Provides on-the-job training for inspectors
- Increases compliance and deterrence among Federal facilities

Barriers

- Requires extensive time and effort to coordinate
- Overwhelms facilities
- Necessitates complex coordination with media programs





Region VIII, with Headquarters in Denver, Colorado, is comprised of six Midwestern and Western States: Montana, Wyoming, North Dakota, South Dakota, Utah, and Colorado. Half of the Region's six States participated in the FMECI during FY 1993 and FY 1994. The Region inspected four Department of Defense facilities. Facilities were subjected to Category C or D inspections. Three of the facilities were classified as large, and the fourth as medium-sized. The level of complexity of compliance issues at these facilities ranged from low to high.

COMPLIANCE/ENFORCEMENT

In Region VIII, four enforcement actions were initiated at two facilities: an NOV and a RCRA §3008(a) Administrative Order in FY 1993 and a Warning Letter and a NON in FY 1994 (see Table 1). No penalties resulted from these actions and all enforcement actions have been issued.

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Warning Letter		1
Notice of Violation	1	
Notice of Noncompliance		1
Administrative Order	1	
Total Number of Actions	2	2

The Region cited Hill Air Force with violations of RCRA while Toole Army Depot received enforcement actions for violations of RCRA and TSCA. Both facilities are located in Utah.

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED
FY 1993				
F.E. Warren Air Force Base, WY	None	None	None	None
Hill Air Force Base, UT	Administrative Order NOV	Issued Issued	RCRA RCRA	None None
Grand Forks Air Force Base, ND	None	None	None	None
FY 1994				
Toole Army Depot, UT	Warning Letter NON	Issued Issued	RCRA TSCA	None None

The Region and State of Wyoming acted as the inspection lead for F.E. Warren AFB. States acted as the inspection lead at the remaining facilities. In Region VIII, the States acted as the enforcement lead for all but one enforcement action (see Table 3).

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1994
Warning Letter		1
Notice of Violation	1	
Administrative Order	1	
Total Number of Actions with State Lead	2	1

Region VIII noted that multi-media enforcement opportunities were not explored when determining enforcement actions and violations. Region VIII indicated that there has been an enhanced environmental compliance, and awareness of compliance, at the inspected facilities. Region VIII stated that inundating the facilities with inspectors from multi-media teams caused the heightened awareness.

As a result of the FMECI, Region VIII increased enforcement activities at Federal facilities, and increased the number of multi-media inspections. Administrative Orders did not

increase in FY 1993 or FY 1994 over previous years, but more warning letters and NOVs were issued as a result of the FMECI.

POLLUTION PREVENTION

During the inspections, the inspectors provided pollution prevention recommendations to the facilities. For example, the State of North Dakota suggested that the Grand Forks AFB change its use of cleaning materials. In addition, the inspection team recommended that Hill AFB exercise caution when selecting pesticides, and limit their storage to one year. The Region also provided the facilities with relevant Pollution Prevention Opportunity Profiles and other information, including points of contact and applicable regulations.

The Region has not yet incorporated pollution prevention remedies into settlements that have resulted from the FMECI enforcement activities. In addition, the Region has not pursued pollution prevention SEPs under these enforcement actions, although they are pursuing them in other cases. Region VIII stated that it could not project a reduction in pollutant emissions/discharges at Federal facilities based on its waste minimization and pollution prevention activities under the FMECI.

ADMINISTRATION, PROTOCOL, AND RESOURCES

When choosing the facilities to inspect, Region VIII considered facility compliance history, relationships to other initiatives, and Regional risk ranking as being most important. Opportunities for pollution prevention and environmental justice were considered somewhat less important. The Region also coordinated with the States with respect to State priorities, and examined factors such as size and nature of the facilities. CFAs were not specifically excluded by Region VIII from receiving inspections under the FMECI; however, no CFAs were inspected during either year of the Initiative. At least two States indicated that Air Force Bases were selected as being high-priority facilities, particularly in FY 1993.

Region VIII noted that the specific allocation of resources within the Region to meet the FMECI's requirements did not significantly impact the availability of resources for other Regional/State enforcement priorities in FY 1994. However, travel costs were a concern for Region VIII. Two States indicated that the multi-media approach was no more efficient or even less efficient than equivalent sets of single media inspections for all phases of the inspection/enforcement process. Another State indicated that the multi-media approach was slightly more efficient.

The Region sought assistance from FFEO and the RCRA Enforcement Division when conducting enforcement activities. Assistance was also sought regarding site access issues. The Region reported that although the Region VIII inspector was fully cleared, the Air Force refused access based on "Need to Know." Despite some obstacles, the Region finalized its administrative enforcement cases within the established one-year time frame.

The Region also noted that some facilities were overwhelmed by the size of the inspection team; one inspection team consisted of 17 participants. The average size of the inspection teams was 10 members. In some cases, the inspection team personnel experienced facility access difficulties relating to national security. The inspections lasted for three and four days. When conducting the actual inspection, the Region provided the facilities with prior notice. In addition, the Region held informational in-briefings and closing conferences.

REGIONAL/STATE COORDINATION

Region VIII included State representatives as part of its inspection team for all multi-media inspections conducted. In fact, the level of interaction between the Region and State during all stages (targeting, inspection, and enforcement action) was significant. According to Region VIII, SEAs have neither enhanced nor impaired the States' ability to participate in the FMECI.

Region VIII noted a few benefits from and obstacles to Regional and State coordination (see Table 4). The Region stated that cross-media communication increased due to the Region/State coordination. For example, the PCB and Toxics programs at EPA found multimedia inspections to be especially helpful. Although the relationship with the States is strong, the Region noted that many competing priorities and diverse communications at different layers of management challenged coordination efforts. According to the Region, the FMECI has been trying for Regional/State relations in some instances. Difficulties have arisen because some States see no added value to the "mega inspection" approach. In this situation, referral to other programs is preferred. Representatives from Utah reported that the State does not support the multi-media inspection approach, particularly joint EPA/State inspections.

Table 4 Regional/State Coordination

Benefits To Increased Coordination

Provides greater cross-media communication

Obstacles To Increased Coordination

- Competing priorities at EPA and the States must be balanced
- Communication through the different layers of management at both EPA and the States can create difficulties
- One State does not perceive added value from this approach

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Region VIII noted that the facilities benefited from the "holistic" coordinated effort of the multi-media approach (see Table 5). Multi-media inspections allowed an entire facility to be viewed in a comprehensive manner and to identify where various statutes interconnected. Citing evidence of this fact, the Region referred to enhanced environmental compliance after the multi-media inspections. For example, when the Region subsequently inspected the Grand Forks AFB, they found the base had undertaken a program to ensure compliance and prepare for possible future inspections. Moreover, prior to the multi-media inspection at another base, the environmental manager focussed his attention on water discharges and air emissions. Following the inspection, he developed a more broad-based understanding of all environmental programs affecting the base. Region VIII also indicated an increased interest in conducting additional multi-media inspections as a result of the FMECI.

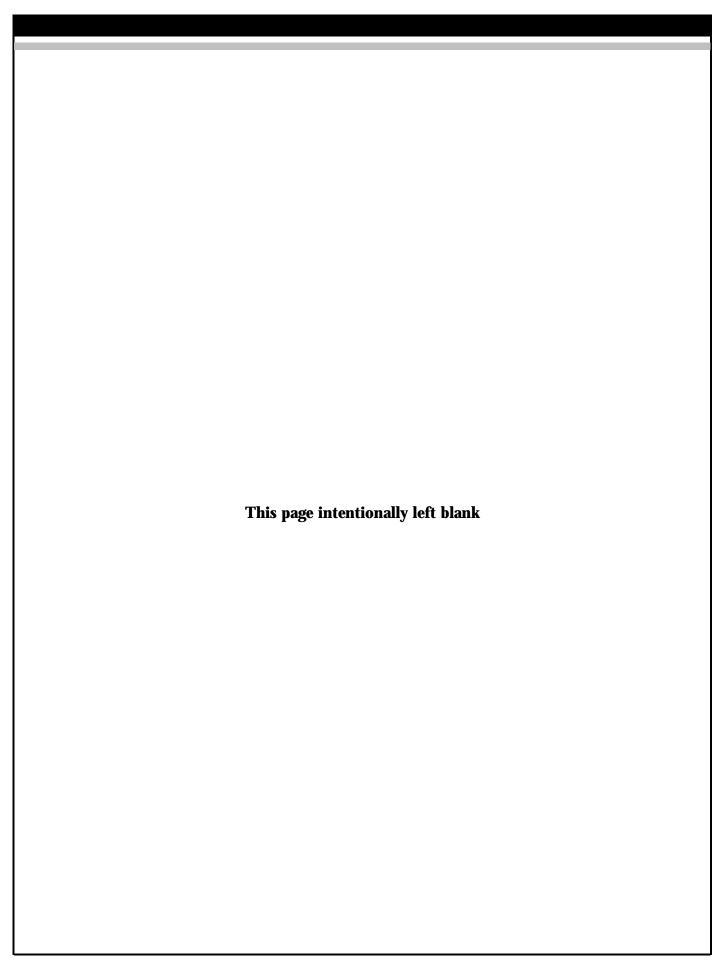
Table 5
Benefits/Barriers to Multi-Media Inspections

Benefits

- Provides comprehensive view of facility
- Supports ability to identify where Statutes interconnect
- Increases the EPA/State compliance and enforcement presence beyond the facilities being inspected

Barriers

Requires significant resources for coordination of inspection and for follow-up decisions





EPA Region IX, with Headquarters in San Francisco, California, consists of Arizona, California, Hawaii, Nevada, American Samoa, Guam, and the Trust Territories of the Pacific. Region IX conducted seven multi-media inspections, two in FY 1993 and five in FY 1994. The Region classified an Environmental Compliance Assessment System Audit of the U.S. Army Kwajalein Atoll (USAKA) in the Marshall Islands as a multi-media inspection. All facilities inspected were medium in size and presented the full range of environmental compliance issue complexity.

COMPLIANCE/ENFORCEMENT

The number of enforcement actions issued in Region IX as a result of the FMECI increased from one Administrative Order for TSCA violations at the Mare Island Naval Shipyard in FY 1993, to five actions for RCRA and TSCA violations issued against three separate facilities in FY 1994 (see Table 1).

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Field Citation		3
Notice of Noncompliance		1
Administrative Order	1	3
Total Number of Actions	1	7

In FY 1993, the State of California assessed a penalty of \$10,800 against Mare Island Naval Shipyard. At USAKA, inspectors identified FIFRA, SPCC, TSCA, and UST violations, but determined that the violations did not warrant enforcement actions. In FY 1994, proposed penalties by Region IX and the States totalled more than \$1.1 million (see Table 2).

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED
FY 1993				
USAKA, Republic of Marshall Islands	None	None	None	None
Mare Island Naval Shipyard, CA	Administrative Order	Issued	TSCA	\$10,800(F)
FY 1994				
Long Beach Naval Shipyard, CA			RCRA	\$400(F)
Luke Air Force Base, AZ	None	None	None	None
Davis-Monthan Air Force Base, AZ			UST	None
U.S. Army Schofield Barracks, HI	Administrative Order Field Citation	Issued Issued	RCRA UST	\$543,900(P) \$77,347(F) None
U.S. Army Presidio, CA Administrative Order NON Field Citation		Issued Issued Issued	RCRA TSCA UST	\$556,500(P) None None

In FY 1993, Region IX led the inspection at Mare Island and the State of California acted as the enforcement lead. The U.S. Army Environmental Health Agency led the inspection of USAKA. In FY 1994, EPA and States shared inspection leads at Long Beach Naval Shipyard and Luke Air Force Base, while the Region acted as sole lead for the remaining three inspections. The State of California took the lead on enforcement actions at Mare Island and Long Beach Naval Shipyards, while Region IX acted as lead on the remaining enforcement actions (see Table 3).

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1994
Administrative Order	1	1
Total Number of Actions with State Lead	1	1

Region IX noted that the audit at USAKA was comprehensive, but questioned how effectively U.S. standards could be applied in a Trust Territory - in this case, the Marshall Islands, because of uncertainty surrounding adherence to the Compact of Free Association. In this situation, U.S. environmental laws were used as a guideline to determine compliance. Although USAKA was not subject to enforcement actions, the inspection report identified needed corrective actions at the base.

Region IX did not explore multi-media enforcement opportunities during the FMECI, nor was the Region able to determine if the FMECI resulted in increased environmental compliance, or awareness of compliance issues at Federal facilities.

POLLUTION PREVENTION

The Region did not supply the inspected facilities with Pollution Prevention Opportunity Profiles. As part of the Administrative Order issued against Schofield Barracks in FY 1994, Region IX pursued four SEPs valued at \$1,245,000. The Region does not project any reduction of pollutant discharges or emissions at Federal facilities based on waste minimization efforts, pollution prevention, or the negotiation of SEPs.

ADMINISTRATION, PROTOCOL, AND RESOURCES

Region IX ranked compliance history, Regional risk ranking, and relationship to other priorities as moderately important factors in selecting Federal facilities to participate in the multi-media inspections. Opportunities for pollution prevention and environmental justice were rated as slightly important. Region IX also considered cost to the Agency as a factor in selecting facilities. The Region did not exclude CFA facilities from the list as a result of the targeting criteria established in the FMECI, although no CFAs were inspected in either FY 1993 or FY 1994.

Region IX did not receive assistance from FFEO, NEIC, RREL, or the OCE. It did, however, receive assistance from other sources. At USAKA, the Army paid for the inspection, but the effort involved multi-Federal agency support.

The Region did not indicate whether resources allocated to meet the FMECI's requirements impacted the availability of resources for other Regional/State enforcement priorities. Special steps taken by Region to ensure the availability of resources included that no significant travel was needed for the Mare Island inspection and that the Army paid for the USAKA inspection.

The time frame for inspections varied from two to 13 days, with the average being slightly more than seven days. Region IX reported no difficulties related to national security or facility access while performing inspections under the FMECI.

REGIONAL/STATE COORDINATION

The Region reported that it and the States interacted and coordinated at a moderate to significant level during each stage of the FMECI. In all but one of the seven multi-media inspections, State personnel participated on the inspection teams.

The Region reported an improvement in its State relations resulting from joint Regional and State activities. In addition, the FMECI had no negative impact on Regional and State relations. SEAs also had no effect on the State's ability to participate in the FMECI. Region IX did not cite any obstacles to Regional and State coordination (see Table 4).

Table 4 Regional/State Coordination

Benefits To Increased Coordination

Improves relationships with State

Obstacles To Increased Coordination

None reported

OVERALL IMPACT OF THE MULTI-MEDIA INSPECTIONS

Region IX noted that the facilities' response to the inspections conducted under the FMECI was positive. Region IX also noted increased interest in using multi-media inspection as a result of the FMECI, specifically in using multi-media approaches to target inspection/enforcement efforts.

Region IX indicated that multi-media inspections strengthened State-EPA partnerships and increased inter- and intra-agency cooperation. However, when compared to single-media inspections, the multi-media approach consumed more time during negotiations with the various Federal and State agencies. The Region also viewed the logistical and resource demands associated with the FMECI 90-day window for conducting the inspections as arbitrary and an

obstacle. Region IX also noted that its multi-media approach places more emphasis on inspection targeting, rather than actually conducting multi-media inspections.

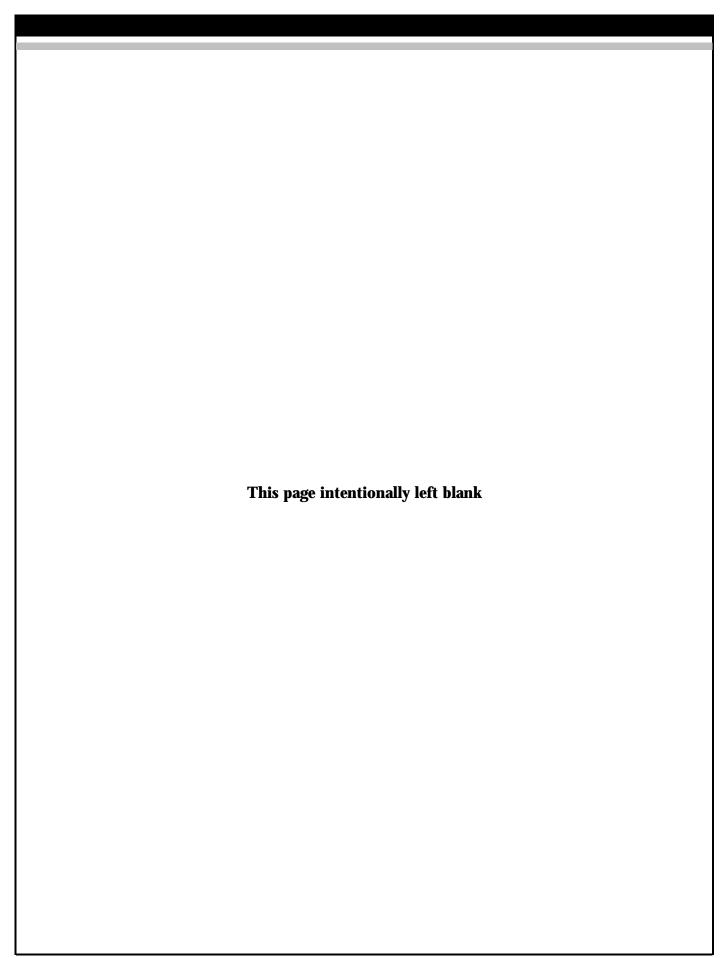
Table 5 Benefits/Barriers to Multi-Media Inspections

Benefits

- Strengthens Regional/State partnerships
- Enhances inter- and intra-agency cooperation

Barriers

- Requires extensive commitment of time to lead and support negotiation across agencies
- Logistics and resources needed to fulfill FMECI requirements





EPA Region X, with Headquarters in Seattle, Washington, has responsibility for four States: Idaho, Oregon, Washington and Alaska. Two States participated in the FMECI in Region X. The Region conducted four multi-media inspections under the FMECI, two in both FY 1993 and FY 1994. The Region conducted Category D inspections at all facilities. These inspections involved extensive coordination with appropriate State and local authorities. All facilities were categorized as large and each posed relatively high levels of complexity in terms of compliance issues.

COMPLIANCE/ENFORCEMENT

Federal facilities in Region X received seven enforcement actions, five in FY 1993 and two in FY 1994 (see Table 1). All inspected facilities were subject to some type of enforcement action as a result of the FMECI (see Table 2). Most actions were taken to address TSCA or CAA violations, although two facilities were cited for RCRA and CWA violations as well.

Table 1
Number and Type of Enforcement Actions Issued

ENFORCEMENT ACTION TYPES	FY 1993	FY 1994
Notice of Violation	3	1
Notice of Noncompliance		2
Administrative Order	2	
Total Number of Actions	5	3

As seen in Table 2, Region X issued TSCA enforcement actions to all four facilities. The Region also issued an Administrative Order to Fort Richardson for CAA violations and a RCRA Administrative Order that included a proposed penalty of \$1.3 million.

Table 2
Enforcement Actions

SITE NAME	TYPE OF ENFORCEMENT ACTION	STATUS OF ENFORCEMENT ACTION	STATUTE/ PROGRAM VIOLATED	PENALTIES ISSUED
FY 1993				
Fort Richardson, AK	Administrative Order Administrative Order NOV	Issued Issued Issued	RCRA CAA TSCA	\$1.3 million(P) None None
U.S. Navy Puget Sound Naval Shipyard, WA			TSCA CAA	None None
FY 1994				
Fort Lewis, WA	NOV NON	Issued Issued	CWA TSCA	None None
Eielson Air Force Base, AK	NON	Issued	TSCA	None

Region X explored multi-media enforcement opportunities during settlement with U.S. Army Garrison-Fort Richardson. The Region indicated that the FMECI has resulted in an enhanced awareness of compliance issues at facilities, demonstrated by the sharing of information about the FMECI between Federal facilities, as well as the significant media interest. The State issued one NOV to Puget Sound Naval Shipyard for violations of CAA (see Table 3).

Table 3
State Lead Enforcement Actions

ENFORCEMENT ACTIONS	STATE LEADS FY 1993	STATE LEADS FY 1994	
Notice of Noncompliance	1		
Total Number of Actions with State Lead	1	0	

The Region noted that the FMECI resulted in an increased number of Category D multi-media inspections, but did not observe an increase in the number of administrative settlements.

POLLUTION PREVENTION

Pollution Prevention has also been a significant part of the FMECI effort in Region X. Waste minimization is required under the 1991 RCRA enforcement agreement between Region X and the Army. During settlement discussions pursuant to the current Fort Richardson and Puget Sound Naval Shipyard cases, SEPs were explored. For example, discussion between the facilities and TSCA staff resulted in both facilities disposing of equipment in order to become PCB-free.

ADMINISTRATION, PROTOCOL, AND RESOURCES

In selecting facilities for inspection, Region X placed the most emphasis on compliance history and other national, State and local priorities. Regional risk ranking, environmental justice concerns, and opportunities for pollution prevention were also considered.

The Region did not receive any assistance from FFEO, RREL, NEIC during the FMECI. Region X expressed some concerns over the allocation of resources for Federal facility multi-media inspections, and the impact of these inspections on single media inspection program resources. However, as the Region gains more experience in the multi-media process, it expects these concerns will be addressed.

Region X was successful in final settlement of the RCRA matter at Puget Sound Naval Shipyard within one year after the second inspection, and the TSCA program issued both TSCA actions within 7-8 months. The Region reports that the process tends to be slower due to the multiple agency review of inspection reports and the length of time needed to decide on appropriate follow-up activities. The Region is committed to shortening the period of time for enforcement follow-up as a result of participation in the FMECI.

Normally Region X performs its multi-media inspections unannounced, with some limited exceptions. At the Puget Sound Naval Shipyard, the Region anticipated some problems in gaining access and requested Headquarters assistance to resolve the problem quickly. The Region has had success in using multi-media Requests for Information that are given to the facility at the initiation of its inspections. This process is used because document review is an integral part of the inspection. Normally, multi-media inspections are staged over a number of days (7-10 days), and the Region routinely performs opening and closing briefings for the inspected facilities. The Region encourages the highest level of base command attendance at the closing briefing to ensure that the environmental concerns are identified and resolved quickly.

REGIONAL/STATE COORDINATION

Region X does not believe that the FMECI has had a negative impact on Regional/State relations; all inspections conducted included State personnel. Region X ranked the level of interaction between Regional and State offices with regard to enforcement actions as moderate, and as moderate to significant during the targeting of facilities to be inspected, as well as the actual inspections.

Region X noted a few benefits from, and obstacles to, Regional and State coordination (see Table 4).

Table 4 Regional/State Coordination

Benefits To Increased Coordination

Increases understanding and cooperation between State, Region, and Federal facilities

Obstacles To Increased Coordination

• Level at which communication occurs delays discussion of decisions and impedes States' ability to consult on issues

OVERALL IMPACT OF MULTI-MEDIA INSPECTIONS

Region X identified several benefits from, and barriers to, using a multi-media inspection approach instead of a single-media approach (see Table 5). Region X believes that a multi-media approach has helped to ensure that each program is aware of the other programs' actions during follow-up enforcement activities. Also, the Region concluded that the deterrent effect, while not quantifiable, is substantial, and that EPA and the State's joint presence is highly visible to the regulated Federal facility community.

Table 5 Benefits/Barriers to Multi-Media Inspections

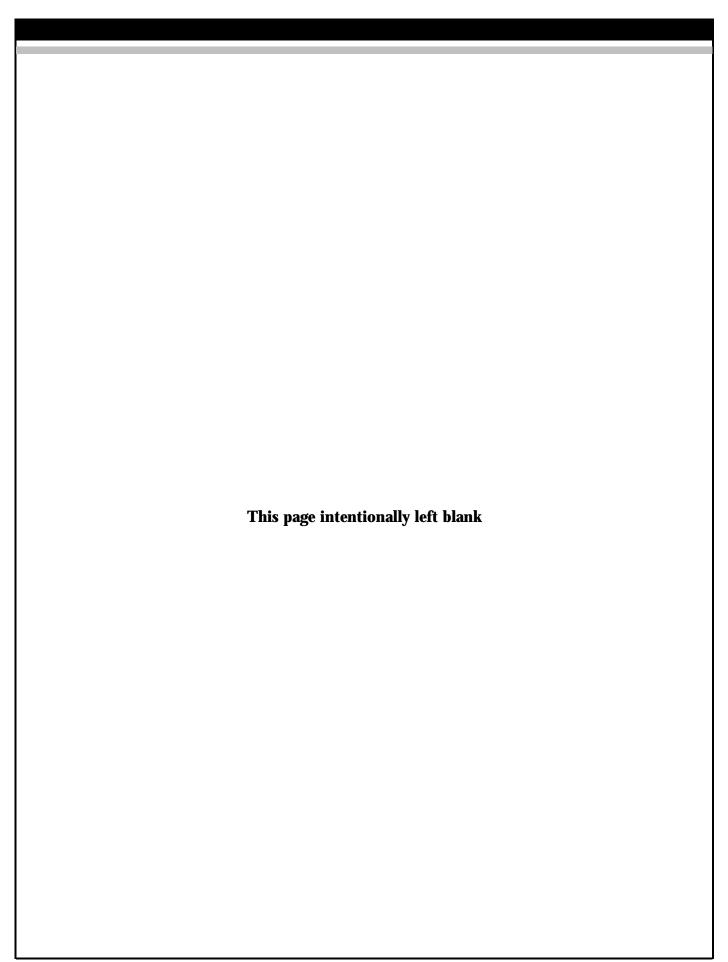
Benefits

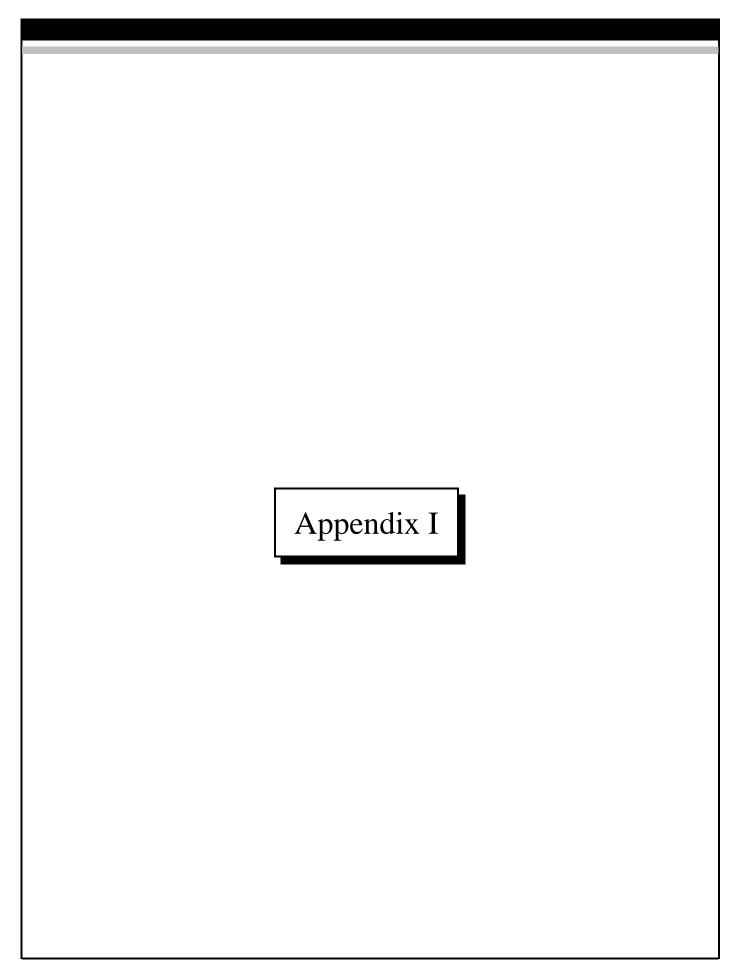
- Ensures that programs are aware of each others' action during ensuing enforcement
- Provides a substantial deterrent effect
- Shows a highly visible presence to the regulated Federal facility community

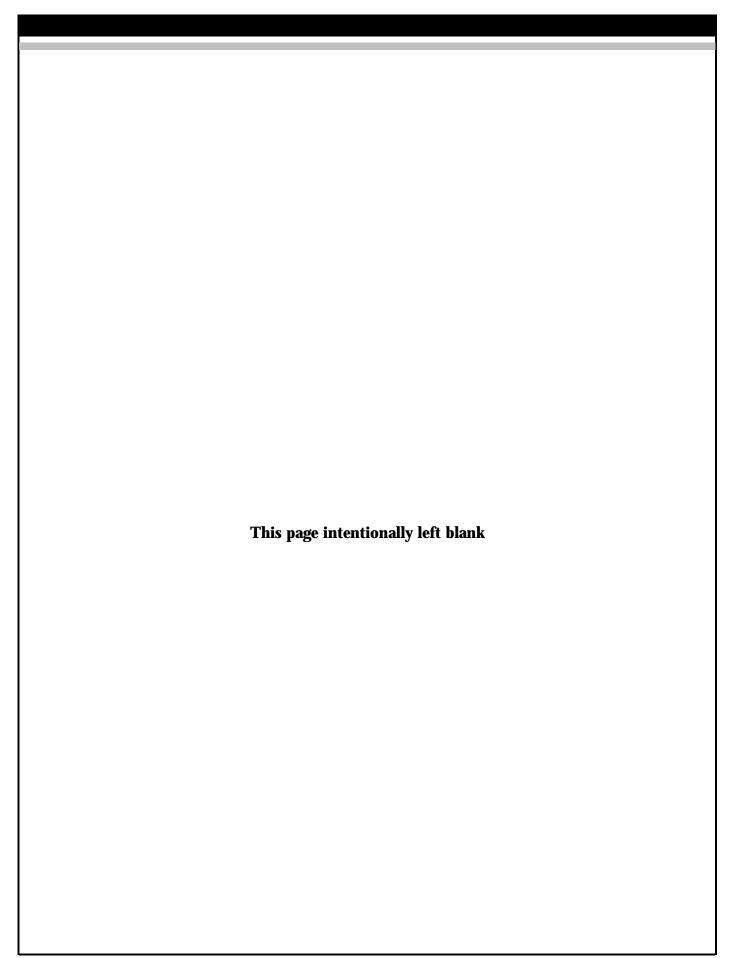
Barriers

• Requires overcoming the reluctance of single-media programs to fully embrace/support the FMECI at the expense of single-media funding

On the other hand, the Region noted that single-media programs had difficulty in fully embracing and supporting a multi-media approach because of the redirection of single-media resources. Despite the disincentives, the multi-media inspection strategy at Federal facilities is gradually "winning converts," and is likely to continue. The Region has been receiving mixed reactions from its States on the utility of performing multi-media inspections.







GUIDE TO POLLUTION PREVENTION OPPORTUNITIES AT NAVAL BASE USA (NBU)

As part of the Federal Facilities Multimedia Enforcement/Compliance Initiative (FMECI), the EPA Federal Facilities Enforcement Office (FFEO) is providing this guidance package to assist enforcement personnel in identifying and documenting pollution prevention (P2) opportunities that can be incorporated into settlement agreements with the above-mentioned Federal facility. This package consists of two parts: a "Federal Facility Pollution Prevention Field Reporting Form" (Attachment A), and a "Pollution Prevention Opportunities Profile" (Attachment B). Both of these parts are specifically prepared for use at the above-mentioned Federal facility.

Part I. Federal Facility Pollution Prevention Field Reporting Form

The field reporting form presented in Attachment A provides a mission statement for the facility, which can be used by inspectors to predict the types of processes and wastes that may be present at the facility. In addition, this reporting form provides a consistent format for inspectors to record information on pollution prevention activities and opportunities at the facility. Parts I through IV of this form are provided by FFEO, and include the facility name, address, and identification number, and a facility mission statement. Parts V through VIII are filled out by the inspector, and are to be maintained as part of the inspection record.

Part V.A is used by the inspector to record information about wastes that may present opportunities for pollution prevention. Part V.B allows inspectors to record the types of pollution prevention opportunities that they know or suspect are relevant to each waste identified in V.A. Inspectors may use the Pollution Prevention Opportunities Profile (Attachment B) as an aid in completing Part V of the field reporting form.

Part VI of the field reporting form allows the inspector to record detailed information about ongoing pollution prevention activities at the subject facility. This information may be used by EPA to propose the wider application of certain pollution prevention techniques implemented at the facility.

Part VII of the field reporting form allows inspectors to record violations occurring at those waste generation activities that have pollution prevention potential as determined pursuant to Part V of the field reporting form. These types of violations may allow the EPA to introduce pollution prevention requirements into settlement agreements.

Part VIII of the field reporting form allows inspectors extra space to nominate one or more pollution prevention opportunities at the subject facility that are most likely to be incorporated into a settlement agreement.

Part II. Federal Facility Pollution Prevention Opportunity Profile

FFEO investigated a number of EPA information sources to identify potential pollution prevention opportunities at NBU. These sources and the types of data they provided are listed below:

- RCRA 3016 database: Annual quantities for each RCRA hazardous waste.
- Aeronomic Information Retrieval System (AIRS) database: Annual quantities of Federal air pollutants.
- Permit Compliance System (PCS) database: Annual quantities of Federal water pollutants.
- RCRA Biennial Reporting System (BRS) database: Types and annual quantities of hazardous wastes.
- Toxic Release Inventory System (TRIS) database: NBU was not found on this database.

Data from the above-mentioned sources were used to prepare the profile for NBU which is presented in Attachment B. This profile does not represent all wastes that may have pollution prevention potential at NBU. Furthermore, this profile may include wastes that have little or no potential for pollution prevention. This profile was prepared to provide the inspectors with an initial list of wastes that, based on data from the above-mentioned sources and the information depicted by the facility mission, appear to present the best opportunities for pollution prevention. The inspector is encouraged to investigate these potential opportunities during upcoming inspections. If the opportunities in the profile are confirmed during the inspection, the inspector should obtain as much additional information as possible on these opportunities and record all such findings in Parts V through VIII of the field reporting form (Attachment A).

Attachment A Federal Facility Pollution Prevention Field Reporting Form

I.	Facility Name:	Naval Base USA				
II.	Facility Address (City, State)	Anytown, Alaska				
III.	EPA ID No.:	AK 1240098136				
IV.	Mission Description:	Naval Base USA is involved in the overhaul and maintenance of surface ships up to attack carriers, attack submarines, and ballistic missile submarines. NBU services include conversion, overhaul, repair, alterations, and drydocking. The base also provides support for air and submarine warfare weapons systems. NBU is the homeport to an aircraft carrier, two cruisers, and two ammunition ships. NBU occupies 1,760 acres in Anytown, Alaska, and employs approximately 16,200 permanent staff (270 officers, 4,390 enlisted personnel, 11,520 civilians, and 20 students).				
V.	Wastes with P2 Potential (obse	erved):				
A.	Waste Description (include was sources, 10 chemical composition physical properties, and quantity	ns,	B.	P2 Opportunities (See Attachment B)		

Waste source description should include the location of the waste generating activity (e.g., building number), and the process that generates the wastes (e.g., degreasing of aircraft motor parts).

VI.	Current P2 Activities						
A.	Waste Description (Sources a			В.	Initiative Desc	cription	n
VII.	Violations affecting Waste So	urces with P2	Potential (see Par	t V of tł	nis form):		
A.	Waste Source	В.	Violation			C.	Status of Violation
		_					
VII.	Recommendations for Modific	cations to Curr	ent Programs				

Attachment B: Federal Facilities Pollution Prevention (P2) Opportunities Profile at Naval Base USA (NBU)

Waste Description ¹¹	EPA 33/50 Program Target (Y/N) ¹²	Annual Waste Quantity	Assumptions on Waste Origin and/or Composition ¹³	Potential Pollution Prevention Opportunities	Data Source ¹⁴
Spent hydraulic fluid (propylene glycol)	N	1.55 tons (1989)	Hydraulic fluid drained from equipment during routine service	 Determine whether hydraulic fluid can be replaced in the equipment after servicing has been completed Identify secondary uses for spent hydraulic fluids 	BRS
Ignitable wastes (D001)	N	6.6 tons (1989)	Mineral spirits from degreasing operations	 Minimize rates of solvent use Replace organic solvents with water-based solvents Extend solvent life by filtering or setting accumulated solids 	BRS
Spent isopropyl alcohol (D0001)	N	3 tons (1989) of spent isopropyl alcohol from 8 sources and 0.45 tons of a solution containing hydrochloric acid, isopropanol, and xylene from 2 sources	Degreasing agents for electronic equipment	 Explore on-site recycling (distillation, filtration, or other means) Minimize rate of solvent use 	BRS

Waste descriptions are derived from the data sources provided in the last column of this matrix. RCRA wastes in reported quantities below 500 lbs (0.25 tons) per year are not included in the matrix. No limits were placed on waste generation quantities for non-RCRA wastes.

 $^{^{12}}$ A voluntary national program to reduce releases of pollutants and off-site transfers of 17 toxic chemicals by 33 percent by the end of 1992 and by 50 percent by the end of 1995. Y=Yes; N=No; I=Insufficient Data. (The 17 chemicals include: benzene, cadmium and cadmium compounds, carbon tetrachloride, chloroform; chromium and chromium compounds; cyanide and cyanide compounds; lead and lead compounds; mercury and mercury compounds; methylene chloride; methyl ethyl ketone; methyl isobutyl ketone; nickel and nickel compounds, tetrachloroethylene; toluene, 1,1,1-trichloroethylene; and trichloroethylene.)

¹³ Assumptions based on professional judgement.

¹⁴ BRS=RCRA Biennial Reporting System; AIRS=Aeronomic Information Retrieval System; and PCS=Permit Compliance System.

Waste Description	EPA 33/50 Program Target (Y/N)	Annual Waste Quantity	Assumptions on Waste Origin and/or Composition	Potential Pollution Prevention Opportunities	Data Source
Mixtures of spent xylene, methyl isobutyl ketone, and toluene	N	59.18 tons (1989) from 15 sources	Degreasing agent or waste paints, paint thinners, and other materials	 Explore on-site recycling (distillation, filtration, or other means) Minimize rate of solvent use 	BRS and PCS
Cyanide wastewater containing cadmium and chromium, as well as chromium wastewater	I	2198 tons (1989)	Rinse water from electroplating operations	Install countercurrent rinsing	BRS and PCS
Acid mixtures contaminated with metals	N	140 tons (1989)	Spent acids from cleaning operations	 Use spent acids to neutralize spent caustics Extend life of acid baths through setting or filtration Use mechanical cleansing or replace acids with hot water or biodegradeable detergents 	BRS and PCS
Mixtures of methylene chloride, xylene, methyl isobutyl ketone, and metals (D005, F002, F003, and F005)	I	28 tons (1989); one waste stream accounted for 17.8 tons in 1989	Paint stripping wastes	 Eliminate all nonessential paint stripping operations Replace oil-based paints with water-based paints Adjust painting operations to minimize waste of paint Recycle organic paint strippers Use mechanical paint strippers 	BRS and PCS
Liquid cleaners containing metals (D006, D007, D008, and D010	Y	82 tons (1989) from 4 major sources (18-23 tons/year each)	Degreasing	 Eliminate nonessential cleaning operations Replace halogenated degreasers with nonhalogenated degreasers Switch to less volatile degreasers and cleaners 	BRS and PCS
Lead work debris (D006, D007, D008, and D010)	Y	25 tons	Scrap lead	Send to an off-site secondary smelter	BRS and PCS

Waste Description	EPA 33/50 Program Target (Y/N)	Annual Waste Quantity	Assumptions on Waste Origin and/or Composition		Potential Pollution Prevention Opportunities	Data Source
Activated carbon contaminated with metals (D007 and D011)	N	0.5 tons	None	•	Send to an off-site carbon recycler	BRS and PCS
Volatile organic compounds (VOCs) from surface coating operations (acetone, methyl ethyl ketone, naphtha, and xylene)	Y	87.23 tons (1991)	None	•	Eliminate all nonessential surface coating operations Change to water-based paints whenever possible	AIRS