BY THE COMPTROLLER GENERAL **Report To The Chairman** Subcommittee On Legislative **Committee On Appropriations House Of Representatives** OF THE UNITED STATES

Status Of Civilian Federal Agencies' Efforts To Address Hazardous Waste Problems On Their Lands

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also known as Superfund) was enacted to address problems posed by uncontrolled hazardous waste sites. Federal agencies must comply with the act's requirements to the same extent as private entities.

GAO found that 11 of 16 civilian federal agencies identified by GAO as having hazardous waste activities were aware of 340 potential hazardous waste site locations on their lands or under their control. Assessment, evaluation, and corrective action at the 340 locations ranged from 105 where no action had been taken to 73 where Environmental Protection Agency (EPA) or other federal agency officials had concluded that no further action was warranted. Some action had been taken at the remaining 162 locations, but additional actions were needed.

GAO also found that EPA's data system, which shows potential hazardous waste site locations and the status of actions performed, was incomplete. GAO recommends that EPA update and correct the data system.

EPA and seven other federal agencies have underway or plan new initiatives to focus civilian federal agencies' attention on hazardous waste site identification, assessment, evaluation, and cleanup issues. In this regard, EPA's ongoing effort to develop a new strategy is key to assuring that federal agencies comply with the act.



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GAO/RCED-84-188 **SEPTEMBER 28, 1984**

UNITED STATES GOVERNMENT



GENERAL ACCOUNTING OFFICE FOR CONGRESSIONAL CONTACT FILE Subcommittee on Legislative House Committee on Appropriations

AUG 3 1 1984

TO : Director, OCA

FROM :

GAO Evaluator, RCED/EPA - (John P. Hunt, Jr.

SUBJECT: Draft Report Entitled Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands (GAO/RCED-84-188) (RCED-4-93) (Code 089268)

On August 31, 1984, I telephoned Mr. Pattison Fulton-Chief Legislative Assistant to the Chairman, Subcommittee on Legislative, House Committee on Appropriations to determine whether the final report's distribution should be restricted. He requested that the final report be restricted for up to <u>10 days</u> after it is transmitted to the Chairman. I agreed to honor his request.

On August 7, 1984, Mr. Fulton was provided with additional summary information he requested on the 340 hazardous waste site locations mentioned in the draft report (see August 8, 1984, OCR memo). He asked whether this information would be included in the final report. I informed him that we planned to include the information as another appendix to the report. He was pleased to hear this and once again complemented the GAO effort put forth on this assignment.

Mr. Peach, RCED cc: Mr. Conahan, NSIAD Mr. Brown, GSC-OD Mr. Wessinger, RCED Mr. White, RCED Mr. Procaccini, RCED Mr. Madonia, RCED Mr. Kepplinger, OGC Ms. Stolzenberg, OGC Mr. Sprouse, NSIAD Ms. Moran, OCG-INFORM Ms. Kopelson, OCG-INFORM Regional Manager, Boston Regional Manager, Chicago Regional Manager, Dallas Regional Manager, Norfolk Regional Manager, San Francisco Regional Manager, Washington Control Desk

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GAO/RCED-84-188



COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON D.C. 20548

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The Honorable Vic Fagio Chairman, Subcommittee on Legislative Committee on Appropriations House of Representatives

Dear Mr. Chariman:

As requested on February 2, 1984, and resulting from our subsequent discussions with your office, this report discusses the efforts of 16 civilian federal agencies to identify, assess, evaluate, and/or clean up hazardous waste sites on their lands or under their control. We examined agency actions that have been taken or planned to identify potential hazardous waste sites and the status of efforts taken or planned to address such potential sites. The Environmental Protection Agency has initiated new actions to assist federal agencies in addressing their hazardous waste site problems.

As arranged with your office, unless you publicly release its contents earlier, we plan no further distribution of this report until 10 days after the issue date. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

Comptroller General of the United States

STATUS OF CIVILIAN FEDERAL AGENCIES' EFFORTS TO ADDRESS HAZARDOUS WASTE PROBLEMS ON THEIR LANDS

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Problems associated with the past handling of hazardous waste have become a national concern. In responding to this concern, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (also commonly known as Superfund) was enacted to address problems posed by uncontrolled hazardous waste sites.¹ CERCLA is managed by the Environmental Protection Agency (EPA).

Federal agencies must comply with CERCLA's requirements to the same extent as private entities. EPA's authority to use CERCLA funds in responding to federal hazardous waste sites is limited to removal actions (prompt responses to prevent or reduce emergency situations). CERCLA-funded remedial actions (permanent remedy or cleanup) at federallyowned facilities are prohibited by the act. Federal agencies are expected to fund these actions through their normal budget process.

Once potential sites are identified, site assessments and investigations become necessary to determine whether problems actually exist. If problems do exist, waste removal or cleanup actions are to be taken to protect the environment and/or public health.

Concerned about how well civilian federal agencies are dealing with hazardous waste problems on their lands or under their control, the Chairman, Subcommittee on Legislative, House Committee on

'Any area where hazardous wastes or substances, as defined under CERCLA, have been deposited, stored, disposed of, placed, or located without adequate measures for controlling the release of such wastes or substances into the environment. Throughout this report the term site is used to mean the location where hazardous wastes or substances have been found or are suspected. At such locations there can be more than one site.

Tear Sheet

GAO/RCED-84-188

Appropriations, asked GAO to examine (1) what agency actions have been taken and/or planned to identify federal sites or federally-owned lands where past hazardous waste problems are known or where the potential for past problems exists and (2) the status of ongoing and planned agency actions to assess and evaluate the potential problems at hazardous waste sites and, where problems do exist or are suspected, the extent to which corrective measures have been taken. (See p. 6.)

The Department of Defense's (DOD's) program to deal with its problems resulting from past hazardous waste disposal practices is being reported on separately by GAO. (See p. 1.)

GAO identified 16 civilian federal agencies having hazardous waste activities. Based on information obtained from EPA or the agencies during February to June 1984, 11 of the 16 agencies were aware of 340 locations with one or more hazardous waste sites on their lands or under their control. The following chart describes the status of actions at these locations.

			Status of actions at locatio		
				Purther	NO
	Number of	Number of	Action	action	action
Agencya	locations	sites	completed	required	taken
COE	4	. 4	4	-	-
DOC	-	-	-	-	-
DOE	38	485	6	26	6
IOD	248	488	45	113	90
DOJ	1	1	-	I	-
DOT	17	26	6	7	4
EPA	-	-	-	-	-
GSA	9	23	7	2	-
HBS	4	4	3	1	-
HUD	-	-	-	-	-
NASA	7	26	2	4	1
TREASURY	-	-	-	-	-
TVA	1	1	-	-	1
USDA	7	10	-	5	2
USPS	-	-	-	-	-
VA	_4	7	-	3	1
Tota	1 340	1,075	73	162	105
			-		_

^aAgencies are COE-Corps of Engineers, DOC-Dept. of Commerce, DOE-Dept. of Energy, DOI-Dept. of the Interior, DOJ-Dept. of Justice, DOT-Dept. of Transportation, EPA, GSA-General Services Administration, HHS-Dept. of Health and Human Services, HUD-Dept. of Housing and Urban Development, NASA-National Aeronautics and Space Administration, TREASURY-Dept. of the Treasury, TVA-Tennessee Valley Authority, USDA-U.S. Dept. of Agriculture, USPS-U.S. Postal Service, and VA-Veterans Administration.

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ACTIONS TO IDENTIFY POTENTIAL SITES

In response to a June 1981 CERCLA site reporting requirement, 51 federal hazardous waste site locations were identified. As of June 1984, 11 of the 16 federal agencies were aware of 340 locations. Of this total, the Departments of Energy and the Interior account for 286 locations, or 84.1 percent. Although two of the remaining five agencies had made some attempts to identify potential sites, these five agencies have no locations included in the total of 340 locations. (See pp. 10 to 13 and 16 to 17.)

Relatively few locations were identified under the June 1981 CERCLA requirement because (1) some agencies were unaware of the notification requirement, (2) guidance issued by EPA in April 1981 recognized that compliance would be difficult and left to the judgment of the individual agencies what actions to perform, and (3) there was no requirement for EPA to determine the adequacy of the efforts performed. (See pp. 10 to 13 and 43 to 56.)

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STATUS OF ASSESSMENT, EVALUATION, AND CLEANUP ACTIONS

Of the 340 locations, information GAO obtained from EPA or the other agencies showed that 105, or 30.9 percent, had not been assessed. For the remaining 235 locations, one or more actions had been taken. For example, 211 had completed preliminary assessments, 83 had completed site investigations, 25 had completed removal actions, and 6 had completed remedial actions. For 73 of the 235 locations, EPA or the responsible agency had concluded that no further action was warranted. (See pp. 25 to 28.)

EPA'S NEW STRATEGY

EPA's Assistant Administrators for External Affairs and Solid Waste and Emergency Response recognized that EPA had placed a low priority on federal agencies and their CERCLA activities. As a result, in July 1984 EPA began discussions, which were still underway in September, with federal agencies about a new strategy for assuring that federal facilities comply with CERCLA. The strategy calls for EPA to issue guidance to federal agencies on developing site identification and documentation programs and has as one objective the definition of actions which must be taken to assess and clean up, where necessary, all federal hazardous waste sites. The EPA officials expect that implementing the strategy will affect the agencies' fiscal year 1986 budgets for CERCLA-type activities. (See pp. 18 to 20 and 34 to 36.)

In commenting on EPA's strategy, agency officials told GAO that it provided the proper focus for dealing with the hazardous waste issues they faced. Questions still unanswered relate to the manner in which it will be implemented, including resources, guidance, direction, and training. The Office of Management and Budget informed GAO in July 1984 that it was awaiting the outcome of EPA's agency meetings before finalizing any decisions on the strategy's further implementation. (See pp. 19 to 20, 35 to 36, and 58 to 64.)

NEW AGENCY INITIATIVES

Seven federal agencies have new hazardous waste site initiatives underway or planned. They include a Veterans Administration survey begun on July 31, 1984, to determine past hazardous waste practices at its 172 hospitals and a planned 3-year effort by the National Aeronautics and Space Administration to assess its historical hazardous substances disposal practices. (See pp. 20 to 21, 38 to 39, and 43 to 56.)

EPA'S INFORMATION ON POTENTIAL LOCATIONS IS NOT COMPLETE

EPA's inventory of potential hazardous waste site locations, maintained in its computerized data system, listed about 17,100 locations nationwide as of February 1984, with 103 coded as belonging to civilian federal agencies. Based on information obtained from EPA or the other federal agencies, GAO found that 48 of the 103 locations were not potential civilian federal agency locations for various reasons, including that no potential CERCLA site existed at the location and that some locations had been incorrectly coded in the data system and in fact were private, state, or DOD locations. GAO also noted that 220 of the 340 federal civilian locations were included in the system, but 164 of the 220 locations were incorrectly coded as private or DOD locations. (See pp. 15 to 17.)

GAO found that the system's information on the status of actions taken at sites was not always accurate or complete because either (1) the EPA regional offices had no knowledge of the actions taken at federal agency locations or (2) the EPA regional offices assigned different priorities to updating information in the system and were selective in the types of data updated. As a result, the system, in many instances, understated the level of actions performed. For example, the system identified 116 of the 220 locations as having no activity. GAO found that only 53 of the 220 locations had no activity. (See pp. 29 to 32.)

GAO believes that for EPA to effectively implement the new CERCLA strategy, EPA's computerized data system must have complete and accurate information on federal agency locations that are in the system and the status of actions taken at those locations. (See pp. 21 to 22 and 41.)

RECOMMENDATIONS TO THE ADMINISTRATOR, EPA

GAO recommends that the Administrator, EPA, instruct the EPA regional offices on the importance and need for complete and accurate information on potential hazardous waste site locations on federal lands. The instructions should also require regional offices to update and correct the computerized data base to (1) show which locations are on federal lands and clearly identify within the data base those locations on federal lands that have been shown to lack the potential for uncontrolled hazardous waste sites and (2) show the current status of site assessment, evaluation, and corrective actions that have been taken at civilian federal agency locations. (See pp. 22 and 42.)

AGENCY COMMENTS

In commenting on a draft of this report, the 16 agencies included in GAO's review generally stated that the report accurately characterized their individual efforts. EPA added that the report accurately reflected its efforts to elevate the priority for oversight of and technical assistance to other agencies in their attempts to satisfy their obligations under CERCLA. EPA also agreed on the importance of keeping accurate and complete information in its computerized data system. (See apps. VI to XX.)

In a draft of this report, GAO had proposed to delete from the data system those locations that have been shown to lack the potential for uncontrolled 'hazardous waste sites. EPA stated, however, that location information should remain in the data base and not be deleted because it provides a record that the location was examined and that it presents no further hazard. (See pp. 22 to 23 and app. VI.)

To satisfy EPA's concern about having a record of actions taken at all locations and GAO's concern about not listing locations known to lack uncontrolled hazardous waste sites, GAO modified its recommendation to require that EPA clearly identify such locations in the data base. (See pp. 22 to 23.)

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ABBREVIATIONS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COE	U.S. Army Corps of Engineers (Civil Works)
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DOJ	Department of Justice
EPA	Environmental Protection Agency
ERRIS	Emergency and Remedial Response Information System
GAO ·	General Accounting Office
GSA	General Services Administration
HHS	Department of Health and Human Services
HUD	Department of Housing and Urban Development
NASA	National Aeronautics and Space Administration
NCP	National Contingency Plan
OMB	Office of Management and Budget
RCRA	Resource Conservation and Recovery Act
TVA	Tennessee Valley Authority
USDA	U.S. Department of Agriculture
	U.S. Postal Service
VA -	Veterans Administration

CHAPTER 1

INTRODUCTION

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Addressing the problems or potential problems related to the handling of hazardous waste has become a national concern. Hazardous waste can seep into ground water supplies, contaminate land, and escape into the air, thereby posing real or potential threats of damage to the environment or adverse human health effects. In responding to this concern, the Congress in 1976 enacted the Resource Conservation and Recovery Act (RCRA) to regulate the current and future management of hazardous waste and in 1980 enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to address problems posed by past uncontrolled hazardous waste disposal practices. The Environmental Protection Agency (EPA) is responsible for implementing the RCRA regulatory program and managing the CERCLA program.

How well are federal agencies addressing potential problems related to past hazardous waste activities? Are the agencies setting a good example for the rest of the nation? These questions were raised on February 2, 1984, when the Chairman, Subcommittee on Legislative, House Committee on Appropriations, asked us to review the status of efforts taken by federal agencies, other than the Department of Defense (DOD), to identify, assess, evaluate, and clean up or mitigate potential or known problems resulting from past hazardous waste disposal activities at federal sites or on federally-owned lands.

DOD, under its Installation Restoration Program, identifies and evaluates suspected problems associated with past hazardous waste disposal sites located on DOD installations and removes such wastes if warranted. At the request of the Chairman, Subcommittee on Legislative, House Committee on Appropriations, and the Chairman, Subcommittee on Commerce, Transportation and Tourism, House Committee on Energy and Commerce, we are examining certain aspects of DOD's Installation Restoration Program and plan to issue a separate report on the program.

RCRA ADDRESSES CURRENT AND FUTURE HAZARDOUS WASTE

RCRA was enacted to, among other things, regulate the management of hazardous waste and improve waste disposal practices. EPA's regulatory program has established reporting, recordkeeping, performance, and operating standards for each of the approximately 52,000 generators, 12,000 transporters, and 8,000 facilities that treat, store, or dispose of hazardous waste. RCRA also authorizes under section 3012 a hazardous waste site inventory program to be carried out by the states.

RCRA requires that any person or company owning or operating a facility where hazardous waste is treated, stored, or disposed of must obtain a permit. The act also prescribes a procedure whereby facilities in operation on or before November 19, 1980, may continue operating under "interim status" until a final hazardous waste permit is issued. Facilities with interim status must be in compliance with the interim status regulations until final administrative disposition of their permit is made, at which time the facilities must be brought into compliance with the final permit regulations.

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The interim status regulations include requirements for preparing for and preventing hazards; contingency planning and emergency procedures; a manifest system for tracking waste; recordkeeping and reporting; ground water monitoring; facility closure and postclosure care; financial responsibility requirements; the use and management of containers; and the design and operation of tanks, surface impoundments, waste piles, land treatment facilities, landfills, incinerators, and injection wells. In addition, the regulations include general requirements for waste analysis, security at facilities, inspection of facilities, and personnel training. According to EPA, the final permit regulations incorporate the interim status requirements and also include additional technical, design, construction, and operating requirements.

CERCLA ADDRESSES PAST HAZARDOUS WASTE PROBLEMS

CERCLA was enacted on December 11, 1980, to clean up problems posed by past uncontrolled hazardous waste sites.¹ The act (commonly known as Superfund) authorizes the federal government to respond whenever any hazardous substance, pollutant, or contaminant is released into the environment or a threat exists that it may be released. The act provides for a \$1.6 billion fund to be accumulated over a 5-year period from feedstock taxes on petroleum and certain chemicals (\$1.38 billion) and from federal appropriations (\$220 million). EPA uses the fund to clean up spilled toxic wastes and hazardous waste sites.

At any time during the cleanup process, EPA can require, to the extent possible, that responsible parties² either perform the cleanup themselves or reimburse EPA and the states for the costs of CERCLA-funded removal and/or remedial actions.

CERCLA required that a plan for implementing the responsibilities and authorities of the act be incorporated into the National Contingency Plan (NCP). This plan, first published in 1968 under the Federal Water Pollution Control Act, initially outlined

- ¹Any area where hazardous wastes or substances, as defined under CERCLA Section 101(14), have been deposited, stored, disposed of, placed, or located without adequate measures for controlling the release of such wastes or substances into the environment.
- ²A person, corporation, or other entity that is (1) a past or present owner or operator of a site and/or (2) a generator or transporter which contributed hazardous substances to a site.

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procedures for oil-spill cleanups. In 1982, under authority delegated to EPA by the President, the NCP was revised to include a delineation of federal and state response authorities under CERCLA for abandoned or uncontrolled hazardous waste sites. The NCP provides for three types of CERCLA actions for incidents involving hazardous waste sites:

--Immediate removal actions are to provide prompt response (within hours or days) to prevent immediate and significant harm to human life, health, or the environment. Examples include averting fires or explosions or preventing the imminent contamination of a drinking water supply. Generally, immediate removals are limited to those efforts which can be completed in 6 months and cost no more than \$1 million. £

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- --<u>Planned removal actions</u> are those that allow time to plan the cleanup activities but which still require an expedited action to reduce an imminent and substantial danger. The 6-month or \$1 million limitation also applies, and states are required to contribute 10 percent of the removal costs. Both immediate and planned removal actions can be taken anywhere a hazardous waste threat exists.
- --Remedial actions are intended to achieve a permanent remedy or cleanup of hazardous waste sites. The NCP requires that the selected remedial approach be cost-effective. Remedial alternatives can include no action, containment of wastes on-site, a mix of cleanup and containment, and total site cleanup. The NCP also requires that the cost of the remedy be balanced against the amount of money in the fund needed to respond to other hazardous waste problems.

To be eligible for a CERCLA-funded remedial action, a site must be included on EPA's National Priorities List. The list designates the nation's worst known sites contaminated with hazardous wastes. The sites on the list are determined by a national ranking system,³ and each state is allowed to designate a state priority site regardless of its national ranking.

Federal agencies are included in CERCLA's definition of "person" and must comply with CERCLA requirements to the same extent as private entities. EPA's authority to take response actions at federal hazardous waste sites is limited to the use of CERCLA funds for removal actions. CERCLA-funded remedial actions at federally-owned facilities are specifically prohibited by the act. The federal agencies are expected to fund such needed actions through their normal budget process.

³The hazard ranking system is designed to estimate the potential hazard presented by releases or threatened releases of hazardous substances, pollutants, and contaminants.

HOW ARE POTENTIAL HAZARDOUS WASTE SITES DISCOVERED?

Abandoned or uncontrolled hazardous waste sites have been discovered and identified through many means, some of which are prompted by CERCLA. In May 1984, EPA had information identifying nearly 18,000 locations where hazardous waste sites were suspected. ł

Various provisions in CERLCA provide for the discovery or identification of such sites. For example, CERCLA Section 103(a) requires that persons, which includes federal agencies, notify the National Response Center--the national communications center for activities related to response actions--when hazardous substances (in certain established reportable quantities) are released into the environment. CERCLA Section 103(c) required persons to notify EPA by June 9, 1981, of the existence of certain hazardous waste treatment, storage, and disposal facilities. Furthermore, CERCLA provides for investigating authority by government authorities which may lead to discovery of a release by an investigating official.

Other discovery or identification means, according to the NCP, can include inventory efforts, such as those required under RCRA Section 3012, and random or incidental observation by government agencies and the public.

EPA maintains a list of potential hazardous waste site locations in its Emergency and Remedial Response Information System (ERRIS). The list contains all locations that, according to the information reported to EPA, have reportedly at some time accepted hazardous substances for transport, storage, treatment, or disposal, or where hazardous substances have either accidentally or illegally been spilled or dumped. ERRIS, according to EPA, is the most complete list of potential hazardous substances waste site locations that exists. As of May 17, 1984, EPA's ERRIS listed 17,880 potential site locations.

WHAT KINDS OF ASSESSMENT, EVALUATION, AND CORRECTIVE ACTIONS CAN BE TAKEN AT HAZARDOUS WASTE SITES?

Once a potential abandoned or uncontrolled site is identified or discovered, EPA believes that certain activities should be performed to determine whether a problem does, in fact, exist at the site and, if a problem does exist, what corrective measures are needed to address the problem. EPA uses a phased approach to determine what actions are required. First, all potential sites receive a preliminary assessment. Second, if appropriate, a site investigation is performed. Finally, if problems are confirmed, an appropriate remedial action is planned and implemented. However, a removal action, as previously discussed, can be taken at any point in the process if circumstances justify such action. Preliminary assessments include an initial evaluation of readily available site information. The purpose of these assessments is to provide the preliminary data and evaluations required to determine whether no further action is necessary, emergency action is called for, or additional investigation is needed. Information obtained during a preliminary assessment includes (1) hazardous substances present, (2) pollutant dispersal pathways, such as surface water or ground water, (3) types of receptors, such as water supplies or wildlife habitat, (4) facility management practices, and (5) potentially responsible parties.

A site investigation builds on information collected during the preliminary assessment phase and may include site inspection, monitoring, surveys, testing, and other information. A major objective is to determine if there is any immediate danger to persons living or working near the facility. In general, the collection of samples is minimized unless there is an apparent risk to the public, such as the use of nearby wells for drinking water, citizen complaints of unusual taste or odor in drinking water, or chemical odors or unusual health problems in the vicinity of the release. Areas that may be addressed during a site investigation include (1) determining the need for immediate removal action, (2) assessing amounts, types, and location of hazardous substances stored, and (3) assessing potential for substances to migrate from areas where they were originally located.

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Removal actions, as previously mentioned, can be either immediate (prevents immediate and significant harm to human life, health, or the environment) or planned (there is time to plan actions needed to reduce an imminent and substantial danger). Between December 1980 and April 1984, EPA had approved 357 locations for CERCLA-funded removal actions with 259 of these actions completed. The following are two examples of completed CERCLAfunded removal actions.

- --California site--The problem was contamination of air and soil and threat of direct contact by individuals, fire, and explosion from cyanide, fluoride, and acids at an abandoned waste site. The removal actions taken included disposing of 40 drums of hazardous materials, removing 120 cubic yards of contaminated soil, and backfilling. Estimated cost: \$85,000.
- --Florida site--The problem was contamination of soil and threat of direct contact by individuals from 3,200 deteriorating drums (some located 25 yards from private homes) and six contaminated lagoons releasing vinyl chloride, benzene, aniline, methylene chloride, phenol, toluene, and polychlorinated biphenyls. The removal actions taken included installing observation wells, suction pumps, and trenches to recover and remove contaminants. Estimated cost: \$250,000.

Remedial actions may involve either transferring the hazardous materials to secure landfills, treating the material at a RCRA-permitted hazardous waste treatment facility, treating or isolating the material on the site, or a combination of these.

Remedial projects are divided into several design and construction phases. The costs of each of these phases vary widely as a result of both the technology selected and the specific needs at each site. At present, the greatest variable in remedial action costs is the amount of off-site control necessary to reverse the effects of ground water contamination. EPA has estimated that at least 40 percent of the sites threatening or already affecting ground water may require this kind of action. When these measures are needed, the cost of a project can more than double, and there may be continuing high operation and maintenance requirements well beyond those normally encountered, particularly if extended pumping and treating is the only practical solution.

OBJECTIVES, SCOPE, AND METHODOLOGY

The objective of our work was to review the status of efforts taken by non-DOD federal agencies to identify, assess, evaluate, and clean up or mitigate potential or known problems resulting from past hazardous waste disposal activities at federal sites or on federally-owned lands. Specifically, the two broad issues to be examined were: -

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- (1) What actions have been taken and/or what actions are planned to identify the universe of federal sites or federally-owned lands where past problems are known or where the potential for problems exists?
- (2) What is the status of ongoing and planned actions to assess and evaluate the potential universe of sites or federally-owned lands and, where problems do exist or are suspected, the extent to which corrective measures have been taken?

To address the first issue, we interviewed both EPA and federal agency officials and obtained documents, where possible, describing past actions to identify the universe of potential federal agency hazardous waste site locations. We also discussed ongoing and future plans related to the identification issue.

To supplement this effort we also attempted to determine what information EPA had on the known universe of potential abandoned or uncontrolled hazardous waste site⁴ locations on the lands of non-DOD federal agencies or under their control. We initially obtained a listing of such locations contained in EPA's ERRIS.

⁴Throughout this report the term hazardous waste site is used to mean the location where hazardous wastes or substances have been found or are suspected. At such locations, there can be more than one site.

be any consensus, we included these situations in our potential universe. Another limitation on our potential universe of locations was whether a location was a current active facility operating under RCRA. If we had information indicating that potential abandoned or uncontrolled hazardous waste sites existed at RCRA facilities, such RCRA locations were included in our universe. ninian'ny s

To address the second issue, we interviewed both EPA and federal agency officials and obtained documents, where possible, describing past actions to assess and evaluate potential federal sites and, if appropriate, the cleanup activities performed. We also discussed ongoing and future plans related to the assessment, evaluation, and cleanup issues.

In determining the status of actions taken at our identified potential universe of federal agency locations, we examined EPA records supporting ERRIS information and EPA and other federal agency files and records, and discussed the locations with both EPA and agency headquarters and regional/field office officials. To summarize the status of actions taken or planned by EPA, the responsible agency, or a state, we used EPA's four site activity categories: (1) preliminary assessment, (2) site investigation, (3) removal action, and (4) remedial action to classify the types of activities performed.

EPA and federal agency officials also provided us with estimates of the costs of making some preliminary assessments, site investigations, removal actions, and remedial actions. Because the information was estimated in many cases, we are providing this information only for illustrative purposes. We did not verify its accuracy.

Based on the information obtained, we summarized the results to show the status of actions taken to date. We then asked EPA regional office officials to review the information obtained to determine certain things for us, such as whether the site location should be listed in ERRIS. We also asked responsible federal agency regional/field office officials their opinions as to whether the location posed a problem or potential problem to the public health or the environment.

Due to the nationwide scope of this review and the time frames established by the Chairman for completing it, we could not conduct, for the most part, face-to-face interviews with all responsible agency officials or review all records that may exist on any particular potential hazardous waste site location. Because any detailed EPA information on these locations is maintained in the regional offices, we visited the 10 EPA regional offices and obtained information EPA maintained in its files and records. We then relied, to a large measure, on additional site information gathered through telephone conversations with appropriate agency officials at both the regional/field office level and at the site level. In all instances we discussed site activities with an official designated as the most knowledgeable about the site and, where appropriate, requested and received supporting information by mail. We also visited at least one potential site in each of EPA's 10 regions. The regional office locations are:

> Region I - Boston, Massachusetts Region II - New York, New York Region III - Philadelphia, Pennsylvania Region IV - Atlanta, Georgia Region V - Chicago, Illinois Region VI - Dallas, Texas Region VII - Kansas City, Missouri Region VIII - Denver, Colorado Region IX - San Francisco, California Region X - Seattle, Washington

Although we did not visit state offices or review their records and files, we did include state actions at potential sites if documentation was available through either EPA regional office or agency files. We also attempted to conduct a telephone survey with all state and territorial hazardous waste management officials. Although we were unable to discuss federal agency hazardous waste site issues with each state, we did contact 40 of the states and territories to gain an understanding of their knowledge of potential federal agency site locations in their respective states. Generally, the state officials were unaware of past attempts by civilian federal agencies to identify potential site locations but believed that the EPA regional office should be aware of any state assessment or evaluation activity at such locations.

We also contacted a number of outside interest groups to determine whether other pertinent information may exist outside of the federal government that could affect the accomplishment of our review objectives. Although such groups were generally supportive of the need to examine the federal agencies' activities, they lacked specific data on the efforts made to date by the agencies. Among the groups contacted were the National Conference of State Legislatures, Association of State and Territorial Solid Waste Management Officials, National Wildlife Federation, Chemical Manufacturers Association, Environmental Defense Fund, and the National Governors' Association.

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Our work was conducted from February through June 1984. Except for the limitations discussed above, our work was performed in accordance with generally accepted government auditing standards.

CHAPTER 2

POTENTIAL HAZARDOUS WASTE SITE LOCATIONS--

IDENTIFICATION ATTEMPTS MADE BY SOME AGENCIES

AND FURTHER EFFORTS UNDERWAY OR PLANNED

Federal agencies have made some attempts to identify potential hazardous waste sites at their locations or under their control. While some agencies, such as DOE and DOI, have identified locations and plan further efforts, other agencies, such as the VA and DOC, have performed few, if any, identification activities but have new initiatives underway or planned. We noted that 11 of the 16 federal agencies were aware of 340 potential hazardous waste site locations on their lands or under their control.

The federal agencies' attempts to identify potential locations ranged from a small number of locations identified during the spring of 1981 when some agencies made efforts to comply with a CERCLA site reporting requirement to other efforts since then that have identified the majority of locations. The role of EPA in the past focused on issuing guidance to implement the CERCLA site reporting requirement. EPA has had minimal involvement with the agencies' attempts to identify potential site locations.

Although the agencies were aware of 340 potential locations, EPA's national inventory of all such locations coded only 103 as belonging to civilian federal agencies. We found that 48 of the 103 lacked this potential for several reasons, such as agency information showed that no uncontrolled hazardous waste site existed at the location or the location actually belonged to DOD, a state, or a private entity. In addition, we noted that 220 of the 340 potential locations were in the inventory but 164 had either private or DOD identification numbers even though the locations were on the civilian federal agencies' lands.

EPA and seven federal agencies have underway or plan additional site identification efforts. EPA has developed a new strategy, which has site identification as a key element, to assure federal facilities' compliance with CERCLA. EPA regional office and federal agency officials viewed the new strategy as providing the proper focus to hazardous waste site issues facing federal agencies. The manner in which it will be implemented, including the availability of resources and the training, guidance, direction, and technical assistance EPA would provide, was the key question they raised.

AGENCIES' IDENTIFICATION EFFORTS

The federal agencies' efforts to identify the possible universe of hazardous waste sites at their locations or under their control have varied--some have attempted to seek information while others are just beginning. Generally, agency officials' knowledge of site reporting requirements of CERCLA and their beliefs that potential hazardous waste problems could exist at locations under their control were key factors influencing the timeliness and level of effort performed. We noted that 51 locations involving 10 of the 16 agencies were identified under the CERCLA Section 103(c) notification requirement. Substantially more potential sites, however, have been identified by some agencies, such as DOE and DOI, since the CERCLA notification requirement passed.

CERCLA Section 103(c) efforts

CERCLA Section 103(c) mandated that certain persons, including governmental entities, notify EPA by June 9, 1981, of the existence of sites where hazardous wastes, as defined under RCRA, are or have been treated, stored, or disposed of in the past.¹

EPA, under guidance it issued in the April 15, 1981, Federal Register recognized that the June 9, 1981, deadline provided a short time period for notifying and that persons may have to expend considerable effort to identify the existence of facilities which contain, or may contain, hazardous wastes. At a minimum, persons had to identify the existence and locations of these facilities, but the EPA guidance did not specify what actions had to be taken to comply. For example, the preamble stated:

"The Agency recognizes that the statutory deadline may not permit many persons, particularly those who are responding for a number of facilities, to undertake extensive searches of archives or to interview former employees to determine the type of activities that took place at a facility years ago, or to sample and analyze the wastes located in facilities."

The preamble further provided that the response could be based on ". . the respondent's knowledge, belief, recollection and an examination of reasonably available records."

EPA received about 11,000 CERCLA Section 103(c) notification reports from all sources, both public and private. Based on work performed at agency headquarters and at selected regional/field offices, we noted that 10 of the 16 agencies had notification reports involving 51 locations.

Exceptions to this notification requirement included facilities that had qualified for interim status under RCRA and facilities at which less than 55 gallons, or 7.5 cubic feet, had been disposed of.

	Section 103(c) Reports
Identified by	Federal Agencies
	Number of locations
Agency	identified
<u></u>	<u></u>
COE	2
DOE	12
DOI	21
DOT	9
EPA	2
	1
GSA	1
NASA ·	
TVA	1
USDA	1
VA	
-	
Total	51

Overall, even though 10 agencies had at least one reported location under the CERCLA Section 103(c) requirement, the efforts of these agencies were quite different. Some agency headquarters, including DOT, EPA, NASA, USDA, and VA, did not notify their component organizations/offices of this requirement, but some of the component organizations/offices independently became aware of the requirement and reported locations to EPA regional offices. Another agency, HHS, did not issue any guidance to its component organizations/offices about the requirement, but one component, the National Institutes of Health, did attempt to identify potential locations but found none. Furthermore, one TVA location was identified by the Department of the Army that formerly used the land now under TVA's jurisdiction. TVA did notify its field components about the requirement, but no potential locations, other than one reported by the Department of the Army, were found.

In contrast, we noted that DOC, DOJ, HUD, USPS, and the Department of the Treasury did not inform their component organizations/offices about the notification requirement, nor did component organizations/offices identify any locations. HUD, USPS, and the Department of the Treasury did not believe that their agencies had the potential for hazardous waste site locations because of the nature of their activities.

Appendix I summarizes each of the 16 agencies' efforts to identify potential hazardous waste site locations under the CERCLA Section 103(c) notification requirement.

Other efforts

We also noted some programmatic actions that had been taken by four agencies--DOE, DOI, and to a much lesser extent, DOT and GSA--independently of the CERCLA Section 103(c) notification requirement, to identify potential hazardous waste site locations. These other efforts resulted in the identification of the majority of hazardous waste site locations known today. For example, DOI identified, late in 1983, 129 sites on DOI lands that had problems or suspected problems related to DOD's former use of the lands. These efforts are discussed by agency in appendix I.

In addition to the above efforts, EPA initiated another effort in November 1983 to solicit potential site information from federal agencies. Through guidance issued to the agencies under Office of Management and Budget (OMB) Circular No. A-106--"Reporting Requirements in Connection with the Prevention, Control, and Abatement of Environmental Pollution at Existing Federal Facilities"--EPA's Office of Federal Activities placed a high priority on projects in three important areas, one of which was CERCLA. The guidance provided that completing identification of sites on federal lands as required by CERCLA Section 103(c) was first priority.

We discussed this A-106 guidance with the federal agencies' headquarters and selected regional and field office officials to determine whether any new site identification efforts had been undertaken. We found that the agencies did not initiate any new site identification efforts because of the guidance. Furthermore, EPA's Federal Facilities Coordinator within the Office of Federal Activities received no responses from the federal agencies' headquarters components on new site identification efforts related to the November 1983 guidance. He informed us that he assumed if sites had been identified, the agencies would have reported the information directly to an EPA regional office. We found, however, that none of EPA's 10 regional offices were aware of any agency site identification efforts related to this guidance.

EPA'S SITE IDENTIFICATION ROLE

EPA was tasked under CERCLA to issue regulations to implement CERCLA Section 103(c) and to become the repository for reported site information. There was no requirement for EPA to determine the adequacy of individual efforts performed. Furthermore, as discussed previously, EPA's CERCLA Section 103(c) guidance recognized that compliance would be difficult within the short time frame to report sites and left to individual judgment what actions to perform. EPA has also had minimal involvement with the federal agencies' attempts to identify potential sites.

CERCLA Section 103(c) process

The CERCLA Section 103(c) process involved a reporting system in which an agency was required only to report specific sites and information related to those sites. To gain a further understanding of the CERCLA Section 103(c) process and the results it produced, we discussed the process with the Chief of EPA's Discovery and Investigation Branch and EPA regional office officials in each of EPA's 10 regions. The Chief of EPA's Discovery and Investigation Branch informed us that he believed that EPA's guidance on how to comply with CERCLA Section 103(c) did allow for interpretations by individuals, including federal agencies, and that he believed that there were probably few sites reported by such agencies. Overall, he told us that he believed there were probably other sites that should have been reported under CERCLA Section 103(c). In his opinion, CERCLA Section 103(c) was a one-time reporting requirement and EPA has not placed a high priority on determining how individuals or agencies complied with it.

EPA regional office officials informed us that they generally believed the CERCLA Section 103(c) notification process was not a success and that federal agencies probably did little to comply with the requirement. However, they were uncertain about what actions federal agencies took to comply with the requirement. EPA regional office officials also informed us that they generally believed the notification requirement was a one-time effort.

Involvement with federal agencies

Over the past few years, EPA's involvement with federal agencies' efforts to identify potential hazardous waste sites has been minimal. According to EPA's Assistant Administrator for External Affairs, EPA had placed a low priority on federal agencies' CERCLA-type activities in the past because EPA was focusing its efforts on private sites. She added, however, that these agencies are now accorded a high priority through increased EPA management attention and emphasis. She cited EPA's new strategy to assure federal facilities' compliance with CERCLA, which is discussed on page 18, as an example of this changed emphasis.

EPA regional office officials offered several reasons to explain the low priority attached to federal facilities in the past. For example, at EPA Regions III, VI, VII, and VIII, we were informed that federal facilities had been given a lower priority than other work (such as dealing with National Priority List sites) or that no formal programs were in place to assist federal agencies in their hazardous waste-related identification efforts. In regions III, IV, and X, the federal facilities compliance program staff had been reduced in the past (or did not exist), further hampering any regional work in the federal sector. Regions VII and VIII have only recently established a federal facilities compliance coordinator position. Region III, IV, VIII, IX, and X officials expressed the belief that the federal sites posing the greatest potential environmental risks or threats to public health had already been identified or were of lesser concern since they were located in isolated areas with little population.

ERRIS DATA BASE PROBLEMS

As discussed in chapter 1, EPA maintains a national inventory of potential hazardous waste site locations. As of February 1984 the inventory listed about 17,100 locations, with 103 locations coded to civilian federal agencies. We found that 48 of the 103 locations had coding problems for several reasons, such as the agency's belief that no uncontrolled hazardous waste site existed or the location was the responsibility of DOD, a state, or a private entity.

According to EPA's Assistant Administrator for Solid Waste and Emergency Response, ERRIS information, such as how many sites have had a preliminary assessment and how many have not, has been relied on by EPA management for programmatic and budgeting decisions. In February 1984 ERRIS listed 517 potential hazardous waste site locations (about 3 percent of the total) as federallyowned facilities.

The identified federally-owned facilities in ERRIS can be separated into DOD and non-DOD facilities based on the coding used for each site's 12-digit identification number. Using the identification numbers, we determined that 103 locations (less than 1 percent of the total locations in ERRIS) were coded as belonging to 12 non-DOD federal agencies. Two of the 103 locations, however, had coding errors since the code identified nonexistent agencies. These two were actually private locations.

During our discussions with federal agency officials about the remaining 101 ERRIS locations coded as belonging to them, nearly one-half (46) of the locations were questioned. According to agency officials, 24 locations did not have uncontrolled hazardous waste sites; 9 locations were active RCRA facilities with no uncontrolled hazardous waste sites; 11 locations were DOD, state, or private locations; and 2 locations involved DOD sites on federal agency lands where DOD or its contractor had formally agreed to take needed assessment or cleanup action. As a result, only 55 of the 101 potential ERRIS locations remained in our universe.

Problems in the accuracy of ERRIS information resulted from two major reasons. The first was the inclusion of RCRA locations by EPA regional office officials without adequate screening to assure that such locations had uncontrolled hazardous waste sites. For example, even though TVA had 19 ERRIS locations in EPA Region IV, 18 probably resulted, according to EPA Region IV's Chief, Site Screening and Engineering Section, from TVA notifying EPA in 1980 under RCRA that it handled hazardous waste. One location also had a CERCLA Section 103(c) notification reported by the Department of the Army. Subsequently, the TVA locations were found to lack sufficient quantities of hazardous waste to be regulated under RCRA (1 location), were delisted from RCRA regulatory control (15 locations), or were active operating facilities under RCRA (3 locations). All locations remained in ERRIS however, because no CERCLA activity, such as a preliminary assessment, had been performed and EPA Region IV placed a low priority on federal facilities.

The second major reason involved coding errors that occurred when locations were input into the ERRIS data base. ERRIS input and updating problems are further discussed in chapter 3 on page 29.

HOW MANY KNOWN POTENTIAL LOCATIONS EXIST BASED ON AVAILABLE INFORMATION?

Identifying the known universe of potential hazardous waste sites at federal agency locations or under the agencies' control was extremely difficult for a number of reasons, such as identifying whether a federal agency had responsibility for the location and what is defined as a potential site. Through our discussions with EPA and federal agency officials and based on documents provided, 340 potential locations involving 11 federal agencies were identified.

We divided the 340 potential locations, based on the information obtained, into three classes: (1) created by agency, (2) possibly created by private entity, and (3) possibly created by DOD. This classification scheme was used to provide further information regarding whether private entities that leased federal land or DOD, through its former use of federal lands, might have created the potential location, not the agency that now owns the land. This classification also recognizes that private entities or DOD could ultimately take some action at the locations.

The following table identifies, by the 11 agencies, the 340 potential federal locations in our universe. The table also shows that 220 of the locations were in the ERRIS data system but that 164 locations had either private or DOD identification numbers.

						c of federal lons in ERRIS
	Number of	E poten	tial lo	cations		With civilian
Agency	Total	FSa	FSPb	FSDC	Total	number
	- ´ A	,	_			4
COE		- 4 - 20	-	-	20	26
DOE	38	38			30	20
DOI	248	39	147	62	154	4
DOJ	1	1	-	-	1	1_
DOT	17	13	-	4	9	7 ^d
GSA	9'	7	2	-	6	5
HHS	4	2	1	1	2	1
NASA	7	5	-	2	4	3
TVA	1	-	-	1	1	1
USDA	7	6	1	-	6	5
VA	4	4	<u> </u>		3	_2
Total	340	119	151	70	220	56

Total Number of Potential Locations by Agency

^aCreated by agency.

bpossibly created by private entity. Possibly created by DOD.

^dDuring this review, an additional DOT location was found to be in ERRIS but was not among the original 103 civilian federal agency locations identified in February 1984. This location is included in the total of seven for DOT. Therefore, 164 of the 220 locations had private or DOD identification numbers.

The following table shows the distribution of the 340 potential federal locations, by EPA regional office. The distribution of the 340 locations by state within each of EPA's 10 regions is shown in appendix II.

by DIA Region								
EPA region	Number Total	of pote FSa	ntial loc FSPb	ations FSDC				
Ĭ	6	2	1	3				
II	30	16	6	8				
III	20	14	4	2				
IV	27	14	1	12				
v	13	10	0	3				
VI	14	12	2	0				
VII	5	5	0	0				
VIII '	28	17	8	3				
IX	127	15	89	23				
X	<u>70</u>	_14	40	<u>16</u>				
Total	340	119	151	70				

Total Number of Potential Locations by EPA Region

^aCreated by agency. ^bPossibly created by private entity. ^cPossibly created by DOD.

NEW IDENTIFICATION INITIATIVES UNDERWAY OR PLANNED

The attention focused on the issue of identifying federal agencies' potential hazardous waste sites has been changing. For example, EPA has recently developed a strategy to assure federal facilities' compliance with CERCLA. A major strategy component emphasizes site identification efforts. In addition, DOC, DOE, DOI, DOT, HHS, NASA, and VA either have underway or plan new site identification efforts. DOD has also initiated a program to identify its formerly-used sites, some of which are now located on federal lands. It is too early to evaluate these efforts, but they have already created a new awareness of the need to address potential hazardous waste sites.

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EPA strategy to assure federal facilities' compliance with CERCLA

EPA was not required by CERCLA Section 103(c) to assure that federal agencies performed adequate site identification activities in the past. EPA's top management now believes, however, that it has an obligation to ensure that these activities are carried out. As a result, EPA has developed a strategy to assure federal facilities' compliance with CERCLA. The strategy's goal is to protect public health and the environment from the dangers of hazardous wastes deposited on federal properties. It outlines a number of specific actions that would affect federal agency site identification activities as well as assessment, evaluation, and cleanup activities (which are discussed on page 34) performed by federal agencies. According to EPA's two principal architects of this strategy--the Assistant Administrator for External Affairs and the Assistant Administrator for Solid Waste and Emergency Response--it provides the mechanism to initiate discussions with and educate federal agencies on roles, responsibilities, and actions required to comply with CERCLA. This strategy was needed because EPA in the past had not fully exercised the authority that both assistant administrators believed that EPA had under existing Executive Orders 12088--Federal Compliance with Pollution Control Standards--and 12316--Responses to Environmental Damage.

As of mid-June 1984, this strategy had not been formally discussed with the federal agencies. The two assistant administrators stated, however, that this initiative is supported by OMB and that they plan to begin individual meetings to discuss the strategy with the various agencies in July and August 1984 so that the agencies' fiscal year 1986 budget plans will reflect CERCLA activities. As of September, these discussions were continuing.

On July 6, 1984, OMB officials, including the Chief, Environment Branch, Office of Natural Resources, informed us that the strategy should provide focus and visibility for federal agencies' CERCLA activities. However, OMB will await the outcome of the EPA discussions with the individual agencies before finalizing any decisions on the strategy's further implementation.

The strategy's four objectives are to (1) define the actions which must be taken to identify, assess, and clean up where necessary all federal hazardous waste sites, (2) specify the responsibilities of the federal agencies, EPA, and the National Response Team² and describe how those responsibilities are related to one another, (3) provide for public disclosure and for participation by state and local governments and the public to the maximum extent possible, and (4) provide effective oversight of--agency planning and budgeting, activities in support of agencies' cleanup responsibilities, and cleanup actions themselves.

Under the site identification issue some of the key elements of the strategy are:

--EPA would issue guidance to the federal agencies on developing site identification and documentation programs which include provisions for public participation. ;

--Each federal agency would establish a comprehensive program, in consultation with EPA and state and local agencies, for identifying and documenting all hazardous waste sites on its properties consistent with the National Contingency Plan.

²Under the NCP, the National Response Team (12 federal agencies) is responsible for national planning and coordination, such as maintaining national readiness to respond to a major discharge of oil or release of a hazardous substance or pollutant or contaminant which is beyond regional capabilities.

- --Federal agencies would notify EPA of all known hazardous waste sites. As new sites are discovered, they too would be reported to EPA. Sites which pose hazards from observed releases would also be reported immediately to the National Response Center.
- --EPA would conduct such reviews of federal agencies' site identification programs and inspections of federal facilities as are necessary to ensure that the programs are sufficient in scope, are technically sound, and that adequate resources have been requested. Disagreements between federal agencies and EPA regarding identification of sites would be resolved administratively.

Because of the potential impact of such a strategy on this review, we obtained in February 1984 a copy of the strategy document from EPA and used it in subsequent discussions with EPA regional office and federal agency officials both at their headquarters and at selected regional/field offices. Although these officials were generally unaware of the strategy document, they did provide overall reactions to the need for such a strategy.

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In general, the strategy was viewed as providing the proper focus on the hazardous waste site issues facing federal agencies. The manner in which it would be implemented, including the availability of resources and the training, guidance, direction and technical assistance EPA would provide, was the key question raised by the officials. In appendix III we provide examples of the EPA regional offices' comments and those made by the federal agencies.

Agencies' site identification initiatives

We noted that 7 of the 16 agencies either have initiated or have planned new site identification efforts. Many of these efforts are being undertaken by those agencies, such as DOC, DOT, HHS, NASA, and VA, that had made few or no previous attempts to identify potential sites. However, other agencies, such as DOE and DOI, that had previously identified a large number of potential sites also plan additional efforts. These efforts are summarized, by agency, in appendix I.

DOD's program to identify formerly-used sites

The Congress appropriated \$150 million to DOD in its fiscal year 1984 budget for an expanded effort in environmental restoration at both active DOD installations and formerly-used DOD lands that are a DOD responsibility. This program emphasizes the identification, investigation, and prompt cleanup of contamination from hazardous substances and waste; correction of other environmental damages, such as unexploded ordnance detection and disposal; demolition and removal of unsafe and unsightly buildings and structures; debris removal; and improvements in DOD's hazardous waste operations. COE is responsible for managing the formerly-used site portion of this program, with about \$10.7 million of the \$150 million earmarked for this purpose.

COE is developing an inventory of sites that could be cleaned up under the program. From this inventory, COE will determine which sites qualify for the program and recommend priorities to DOD of eligible sites for program funding. Many of the potential sites are now located on federal agency lands.

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COE has received information from several federal agencies concerning potential sites on their lands that may relate to past DOD activities. For example, on January 10, 1984, DOI provided COE a list of 129 potential sites. DOI had previously developed this list in response to congressional inquiries. COE also requested site information on March 9, 1984, from USDA, DOT, and GSA. As of late May 1984, COE had received the following responses:

- --On May 11, 1984, GSA identified 86 formerly-used sites under GSA's control which may be candidates for the program. GSA plans further analysis at these sites to determine which, if any, may have contaminants that DOD created.
- --On May 17, 1984, USDA's Forest Service identified about 30 sites on National Forest System lands.

In addition, the Chief of the U.S. Coast Guard's Environmental Compliance and Review Branch informed us on July 2, 1984, that two sites have been identified and reported, two additional sites will be reported, and efforts are continuing to identify other sites.

CONCLUSIONS

Efforts of federal agencies to identify potential hazardous waste site locations on their lands or under their control have resulted in 11 of 16 agencies having identified 340 locations to date. Additional site identification efforts are now underway or planned by EPA and seven of the agencies. These efforts could result in the identification of other potential hazardous waste site locations on the federal agencies' lands.

EPA's new strategy to assure federal facilities' compliance with CERCLA was viewed by EPA regional office and federal agency officials as having the potential to focus the federal government's attention on hazardous waste site issues. Whether this potential is realized depends on how effectively EPA implements the strategy, and whether it can address the issues identified by federal agencies and EPA regional offices, such as the resources available to the agencies and the extent of guidance, direction, and training provided to the agencies by EPA. EPA is now discussing these issues with the federal agencies.

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The federal agencies were aware of a substantial number of site locations--some are in the ERRIS data base while others are not. We found numerous coding problems with locations in ERRIS and identified others that were in ERRIS that should not have been listed according to agency officials. The ERRIS data base, according to EPA, is an important EPA management tool affecting CERCLA programmatic and budgeting decisions. It will become more important in the future to document the extent of agency site identification efforts, as called for under EPA's strategy. The strategy does not provide for correcting the ERRIS problems. However, we believe that the ERRIS information must be complete and accurate if EPA management expects to rely on it in the future.

RECOMMENDATION TO THE ADMINISTRATOR, EPA

We recommend that the Administrator, EPA, instruct the EPA regional offices on the importance and need for complete and accurate information on potential hazardous waste site locations on federal lands. The instructions should also require regional offices to update and correct the ERRIS data base to show which locations are on federal lands and clearly identify within the data base those locations on federal lands that have been shown to lack the potential for uncontrolled hazardous waste sites.

AGENCY COMMENTS AND OUR EVALUATION

We requested and received comments on a draft of this report from EPA and the 15 agencies mentioned in the report (see apps. VI to XX).

EPA agreed that it was important to keep accurate and complete information in ERRIS. EPA stated in its comments that ". . it is desirable, but not critical, that sites be coded as to ownership by Federal agencies" but disagreed on the proposal in our draft report to delete from ERRIS those locations on federal lands that have been shown to lack the potential for uncontrolled hazardous waste sites.

EPA stated that it has always been its policy to list in ERRIS every potential uncontrolled hazardous waste site and that when a site is determined to be no hazard for any reason, whether a problem never existed or when a remedial action is complete, EPA notes that the site is no further hazard in ERRIS, but it remains on the list. EPA stated that unless the site remains on the list, it becomes impossible to track when answering later inquiries and there is a strong possibility it could cycle back and enter the system again, causing wasted or duplicative effort. EPA also stated that it often references previous investigations in the nearby geographic area to avoid duplicating expensive investigative efforts. If a site was deleted, EPA stated that there would be no way to reference data in the deleted file through the automated system. Our proposal was based on our concern that by keeping the location names in ERRIS, even when it has been shown that a site did not exist, the federal government's uncontrolled hazardous waste site problem can be made to appear larger than it may really be. For example, as we stated on page 15, from our original universe of 103 ERRIS locations coded to civilian federal agencies, there were 24 locations that did not have uncontrolled hazardous waste sites and 9 other locations that were active RCRA facilities with no uncontrolled hazardous waste sites. All 33 locations would remain in ERRIS based on EPA's comments.

However, we recognize the importance of maintaining information on actions taken at locations even when the location had no potential uncontrolled hazardous waste sites. Therefore, to satisfy both the concerns of EPA about having a record of actions taken at all locations and ours about showing which locations do, in fact, have uncontrolled hazardous waste sites, we are now recommending that EPA clearly identify within the ERRIS data base those locations on federal lands that have been shown to lack the potential for uncontrolled hazardous waste sites.

By adopting our recommendation, we believe that ERRIS would provide a more accurate presentation of the federal government's uncontrolled hazardous waste site problems. We also believe that this information will become important in the future as EPA strives to achieve the first objective under its new CERCLA strategy--defining actions that must be taken to identify, assess, and clean up where necessary all federal hazardous waste sites.

Additional comments were provided by 14 other agencies. These comments generally stated that the report correctly described the agency's hazardous waste site efforts and/or helped to clarify some of the issues discussed in this report. Their comments have been included in the report where appropriate. DOE provided oral comments, through its Director, Office of Operational Safety, and stated that it had no substantive comments to make on the report's information related to DOE.

CHAPTER 3

STATUS OF ASSESSMENT, EVALUATION, AND

CORRECTIVE ACTIONS AT AGENCY LOCATIONS

As discussed in chapter 2, the federal agencies have identified 340 potential hazardous waste site locations on their lands or under their control. The status of assessment, evaluation, and corrective action at these locations has ranged from complete action to no action, as shown below:

- --73 locations, pr 21.5 percent, had been assessed, evaluated and/or cleaned up, and appropriate EPA or agency officials had determined that no further action was warranted;
- --162 locations, or 47.6 percent, had some action but were awaiting further assessment, evaluation, and/or cleanup action; and

--105 locations, or 30.9 percent, had no action taken.

Information EPA maintains on the extent of actions taken at hazardous waste site locations is limited to the locations listed in ERRIS (220 of the 340 locations, or 64.7 percent). In addition, the information is not always current because either (1) the agencies have taken actions and not reported them to the EPA regional offices or (2) EPA regional offices assigned different priorities to updating ERRIS information and the types of data updated.

In locations where additional actions were still required, agency officials offered a wide range of reasons why actions had not been taken, such as limited resources, the absence of guidance and training, or the belief that the locations presented minimal environmental and/or public health threats because of their remote and isolated locations.

Similar to the site identification issue, EPA and three federal agencies--DOE, DOI, and NASA--have recognized that past assessment, evaluation, and/or cleanup efforts have not always been sufficient. As a result, EPA and these agencies have underway or plan new initiatives to focus increased federal attention on the problems presented by hazardous waste sites and the need to complete actions. EPA's strategy to assure federal facilities' compliance with CERCLA was one of the principal initiatives. Although it is too early to determine whether these initiatives will be successful, they have generated an increased awareness of hazardous waste site problems facing the federal government.

STATUS OF ACTIONS AT HAZARDOUS WASTE SITE LOCATIONS

EPA, the federal agencies, and sometimes the states had taken some form of assessment, evaluation, and/or cleanup action at 235, or 69.1 percent, of the 340 site locations. Information on the costs of these actions is limited. Action had not yet been taken on the remaining 105 locations. Activity at the 235 locations included

--completed preliminary assessments at 211 locations,

-- completed site investigations at 83 locations,

--completed removal actions at 25 locations, and

---completed remedial actions at 6 locations.

Because any given location can have more than one site, a completed action at a location does not necessarily mean that all needed actions have been taken at that location. For example, one location in EPA Region IV had 28 sites, with completed or ongoing preliminary assessments at 26 sites. Further action was still required at the last two sites. In the statistics shown in the preceeding paragraph, this location would be counted as 1 of the 211 where preliminary assessments had been completed. We found that at least 77 of the 340 locations had more than one site, as the following table shows.

Number of sites	Number of locations
1	209
2	27
3-5	30
6-10	11
11-50	7
51-100	1
Over 100	1
Unknown ^a	_54
Total	340

Number of Sites at 340 Locations

^aBecause the number of sites could not be readily determined, we used an unknown category. It is assumed that each such location would have at least one site.

The status of assessment, evaluation, and/or corrective actions, as shown by the following charts, varied by both the agency responsible for the location and whether the location was

created by the federal agency, possibly created by a private entity, or possibly created by DOD.

	•			of actions at	
_	Number of	Number of		Further action	
Agency	locations	<u>sites</u> a	completed	required	<u>taken yet</u>
COE	Λ	٨	٨	_	_
	20	305	Ċ	26	c
DOE	38	485	6	26	6
DOI	248	488	45	113	90
DOJ	1 '	' 1		1	-
DOT	17	26	6	7	4
GSA	9	23	7	2	_
HHS	4	4	3	1	-
NASA	7	26	2	4	1
TVA	1	1	-	-	1
USDA	7	10	-	5	2
VA	4	7		3	1
mot al	240	1 075	72	160	105
Total	340	1,075	73	162	105

Status of Actions at Agency Locations

^aBecause 54 of the 340 locations had an unknown number of sites, we assumed that each of the 54 locations would have at least one site.

Number	of	Comple	ted :	Site	Actions	at
	1	Agency	Loca	tions	5	

		Completed	d_actions at ag	ency loca	tions
	Number of	Preliminary	Site	Removal	Remedial
Agency	locations	assessment	investigation	action	action
COE	4	4	2	2	-
DOE	38	32	.11	3	2
DOI	248	143	55	10	3
DOJ	1	1	1	1	-
DOT	17	8	3	5	-
GSA	9	8	· 4	4	1
HHS	4	4	1	-	-
NASA	7	3	2		-
TVA	1		-	-	-
USDA	7	5	3 '	-	→
VA	4	3	1		-
	<u>_</u>			—	-
Total	340	211	83	25	6

Number of Completed Site Actions by					
Type of Location					
			actions at age	ency loca	ations
Type of	Number of	Preliminary	Site		
<u>location</u>	locations	assessment	<i>investigation</i>	action	<u>action</u>
Created by federal agency Possibly created by private	119	83	36	18	3
entity Possibly created	151	92	44	5	3
by DOD	70	36	_3	_2	Ξ
Total	340	211	83	25	6

The degree to which the 340 locations posed a problem or potential problem to public health or the environment was estimated for us by federal agency officials knowledgeable about the locations. These officials estimated, as shown in the following table, that 109 of the 340 locations posed a problem, while 140 locations did not.

Federal Agency Offi	
Problems Posed to P	ublic Health or the
Environment by Ha	zardous Waste Site
Loca	tions
Degree of	Number of
problem	locations
Serious	15
Moderate	31
Minor	63
No problem	140
No basis to judge	89
Other	2a
Total	, 340

^aFor one location we could not locate a knowledgeable agency official and for the other location there were 43 sites (8 moderate problem, 1 minor problem, 1 no problem, and 33 no basis to judge). Appendix IV provides additional overall information on the 340 locations. Appendix V provides summary information on each of the 340 locations.

Little information on resource expenditures

Limited information is available on the resources expended by either EPA or the agencies at the 235 locations where assessment, evaluation, and/or cleanup action has been taken. Complete cost information was not available because either EPA regional offices did not maintain readily available cost data or the federal agencies did not foresee a need to keep records on such costs and performed the actions as part of their normal operations. However, EPA regional offices and some federal agencies provided estimates of the costs incurred in performing the various actions. We did not verify the cost estimates and include the information only to illustrate the wide variety of costs.

EPA estimated that it expended \$113,000 for preliminary assessments completed at 60 locations, \$2 million for site investigations completed at 31 locations, \$1.3 million for hazardous waste removal actions completed at 4 locations, and \$500,000 for a remedial action completed at 1 location. EPA normally expended from \$900 to \$2,000 to complete preliminary assessments at the 60 locations. However, in some instances the cost was as small as \$40 and in others as large as \$20,000. Costs were low where little action was taken to conduct the preliminary assessment; costs were high where a vast area of land was assessed as part of EPA's efforts to place the location on the National Priorities List. Site investigation costs ranged from \$400 to \$1.56 million (includes preliminary assessment costs for one location with five sites). For 22 of the 31 locations with site investigations, the costs were \$15,000 or less. The amount expended to conduct removal actions ranged from \$43,000 to \$635,000 for the four locations.

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Federal agencies estimated that they expended \$486,000 for preliminary assessments completed at 5 locations, \$21 million for site investigations completed at 8 locations (\$20.4 million resulted from site investigations completed since 1971 at 1 location having 318 sites), \$3.1 million for removal actions completed at 13 locations, and \$1.4 million for remedial actions completed at 4 locations. The agencies expended as little as \$500 for completed preliminary assessments to as much as \$300,000 for a location having 19 hazardous waste sites. Other than the one location where \$20.4 million was expended, site investigations ranged from \$1,000 to \$800,000. Removal actions ranged from \$5,000 to \$1.6 million, while remedial actions ranged from \$5,000 to \$1.2 million.

EPA DATA ON NUMBER AND STATUS OF ACTIVITIES WERE NOT COMPLETE OR ACCURATE

EPA's knowledge of the status of activities performed at the 340 federal agency locations was not complete or accurate because (1) 120 locations (about 35.3 percent) were not included in EPA's ERRIS data base and (2) the status data contained in ERRIS for the 220 locations that were included often did not reflect activities performed by either EPA, the federal agencies, or other parties. The data in ERRIS, in many instances, understated the actions taken because individual EPA regional offices assigned different priorities to inputting or updating ERRIS data and were selective in the types of data updated.

ERRIS data base did not include all known potential locations

Although we identified 340 potential federal agency locations through discussions with federal agency officials and review of their files and records, only 220 locations were included in EPA's ERRIS data base. However, as discussed in chapter 2, only 56 of the 220 locations were accurately coded as belonging to federal agencies. There were 164 coded as DOD or private locations. The following chart illustrates the number of federal locations included in ERRIS by agency and highlights the number with civilian federal identification numbers in the universe of 340 locations.

Agency	Number of potential locations	Total	In ERRIS Civilian federal identification number
COE	4	4	1
DOE	38	30	26
DOI	248	154	4
DOJ	1	1	1 · · ·
DOT	17	· 9	7a
GSA	9	6	5
HHS	4	2	1
NASA	7	4	3
tva	1	1	1
USDA	7	6	· 5
VA	4	3	_2
Total	340	220	56

Number of Potential Locations in ERRIS with Civilian Federal Identification Numbers

^aDuring this review, an additional DOT location was found to be in ERRIS but was not among the original 103 civilian federal agency locations identified in February 1984. This location is included in the total of seven for DOT. Therefore, 164 of the 220 locations had private or DOD identification numbers.

EPA officials from several regions, including regions III, IV, V, VI, and VII, provided two reasons to explain why all potential locations were not in the ERRIS data base: (1) the EPA regional offices were not familiar with the locations and (2) the responsible agencies had not notified EPA of these locations. We did find two instances, however, where EPA regions did have knowledge of federal agency locations but they were not in the ERRIS data base because of oversights. For example, in EPA Region V, a U.S. Coast Guard location in Traverse City, Michigan, had extensive EPA involvement ranging from an August 1982 EPA-conducted preliminary assessment to the receipt of over \$137,000 in CERCLA immediate-removal funding in June and December 1982 (the Coast Guard later reimbursed the CERCLA fund). This location was also nominated in April 1984 as a candidate for the National Priorities List. EPA Region V officials stated that an apparent lack of communication between EPA offices in region V had resulted in this location's exclusion from ERRIS.

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Similarly, in EPA Region IV, two of DOI's Fish and Wildlife Service locations had not been entered into the ERRIS data base even though EPA regional office officials were aware of them. These site locations became known when DOI submitted CERCLA Section 103(c) notification forms, but the forms were not in the proper EPA regional office files. As a result, these locations had not been entered into the ERRIS data base.

ERRIS data did not include all performed activities

Information in the ERRIS data base on the status of assessment, evaluation, and cleanup activities for the 220 locations was not always accurate because (1) the federal agency or another party took action at the location but EPA had no knowledge of the action and (2) EPA regional offices differed in the priority attached to updating information on ERRIS locations and were selective in the types of data updated. As a result, the ERRIS data did not consistently reflect the activity performed at the locations and, in many instances, understated the actions taken. For example, there were locations where ERRIS did not show any site activity, yet the actual activity performed included a preliminary assessment and a site investigation and a decision had been reached that no further action was warranted.

The following chart compares (using EPA's site activity categories) the level of activity completed at the 220 locations as shown in the ERRIS data base as of July 5, 1984, with the actual activity found during our review.

Level of Activity Completed at 220 ERRIS Locations--ERRIS Data Base Compared With Actual Activities

	Number of	actions completed
	ERRIS	Actual
Activity	<u>data</u>	<u>activity</u>
No activity	116	53
Preliminary assessment	101	157
Site investigation	30	71
Removal action	2	18
Remedial action	0	5
No further action warranted	17	61

With respect to the 56 locations in the ERRIS system which were properly identified as federal agency locations, we compared the information shown in the ERRIS data base with the information compiled during our work at EPA regional offices and with agency regional/field offices. The following chart shows that the ERRIS data system understated the actual activities performed at 34 of the 56 locations.

Site Activity at 56 LocationsERRIS			
Data Base Information Compared			
	With Actual	Activities	
	~ <u>~~~~~~~~~~~~~~~~~</u>		
		Number of locations where	
EPA	Number of	ERRIS data understated	
region	locations	activities performed	
	· · · ·		
I	1	0	
II	ġ.	6	
III	3	2	
ĪV	9	4	
v	5	4	
VI	. 6	3	
VII	1	1	
VIII	7	Δ	
IX	6	4	
x	9		
А		6	
Total	56	34	
10041	50		

For the most part, the understatements were caused when agencies or other parties took actions at a location but did not notify EPA of such actions; in other cases, EPA had the information in its files but for a variety of reasons did not update the ERRIS data base. These situations are discussed in the following two sections.

Action taken but not reported to EPA--no requirement to do so

One major reason that ERRIS did not show the actual extent of assessment, evaluation, or corrective action was that actions were taken by either the federal agency or another party and EPA had no knowledge of the actions. Because the ERRIS data system reflects only actions input by EPA regional offices, these offices must have knowledge of the action before it can be shown in the ERRIS data base.

For EPA Regions III, IV, VI, and IX, at least one-half of the understatements were due to actions taken by agencies or other parties of which EPA had no knowledge. For EPA Region II, this lack of knowledge was also a major reason for the understatements. However, there was no requirement for agencies to notify EPA of actions taken at their locations. This situation may be addressed through the implementation of EPA's strategy to assure federal facilities' compliance with CERCLA, which is discussed on page 34.

EPA regional office differences in updating ERRIS to reflect known actions

Another major reason that ERRIS did not show the actual extent of actions was that EPA's regional offices differed in the priority attached to updating ERRIS information and were selective in the types of data updated. The following examples illustrate the situations found in various EPA regional offices.

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Each EPA regional office has a responsibility under the EPA Administrator's Management Accountability System for keeping ERRIS data complete and current. However, we found that the regions, in many instances, have not fulfilled this responsibility. For example, region VIII officials informed us that lack of time and more pressing work prevented all information in their files from being entered into ERRIS. Region IX was just placing a system in process for updating its ERRIS data base, and some region IX project officers believed that a policy was needed to ensure that updated information was provided to the proper personnel and that additional knowledge of the ERRIS system was needed. In region V, only activities performed in accordance with CERCLA requirements after July 1981 were entered into EPA files and records. Also, region VI personnel informed us that they had not input removal or remedial actions into ERRIS unless the site was on the National Priorities List. In region VII we found that even though a site investigation was made at one site, it was not reflected in ERRIS because a comprehensive narrative report did not accompany the site investigation report.

PROBLEMS PERCEIVED IN COMPLETING ADDITIONAL ACTIONS

As discussed earlier, actions have been completed at 73 of the 340 locations. The remaining 267 locations, or 78.5 percent, required additional action. Although some EPA and federal agency officials informed us that they did not perceive any problems in completing additional actions at these locations, other EPA and agency officials did. These officials, as the following examples show, cited problems with resources, guidance, training, and direction and/or the belief that the locations presented minimal environmental and/or public health threats.

- --Limited resources were cited by EPA regional office officials in regions II, IV, V, VIII, and IX; by DOI officials in EPA Regions II, V, IX, and X; by DOE officials in EPA Regions IV and X; and by a DOJ official in EPA Region IX.
- --The need for additional guidance, direction, or training was cited by EPA regional office officials in regions VIII and X; by DOI officials in EPA Regions V, IX, and X; by DOE officials in EPA Regions IV, IX, and X; and by a DOT official in EPA Region V.
- --A belief that there was minimal environmental and/or public health threats--primarily because the location was in a remote or in an isolated area--were cited by EPA regional office officials in regions IX and X; by DOI officials in EPA Regions IV, IX, and X; by a DOE official in EPA Region V; and by a NASA official in EPA Region V.

NEW INITIATIVES UNDERWAY OR PLANNED

Site assessment, evaluation, and cleanup efforts have started to receive increased attention by both EPA and the federal agencies and even, in part, by DOD. For example, EPA has developed a new strategy to assure federal facilities' compliance with CERCLA and plans to include federal locations for the first time on the CERCLA-mandated National Priorities List. Also, through funding authorized under RCRA Section 3012 (hazardous waste site inventory) states have conducted assessment and evaluation activities at some federal locations. In addition, agencies such as DOE, DOI, and NASA are developing more formalized agency-wide programs to assess, evaluate, and clean up locations. DOD, through its formerly-used site program, has also provided additional resources to address some federal agency sites. Furthermore, legislation has been introduced in the 98th Congress that would amend CERCLA to address federal hazardous waste sites.

As was the case with the recent hazardous waste site identification initiatives discussed in chapter 2, it is too early to evaluate these new efforts. However, they have already created a new awareness of the hazardous waste site problems that exist today and the need to continue the site assessment, evaluation, and cleanup process at federal agency locations.

EPA strategy to assure federal facilities' compliance with CERCLA

As discussed in chapter 2, EPA has developed a strategy to assure federal facilities' compliance with CERCLA. The strategy outlines a number of specific actions that would affect the assessment, evaluation, and cleanup activities performed by federal agencies. The strategy is being discussed internally at EPA, and EPA began discussions about the strategy with federal agencies this summer. These discussions were still underway as of September 1984. Under the strategy:

- --Federal agencies would perform preliminary assessments, consistent with the NCP, of sites identified as having hazardous wastes. Sites which could possibly require the immediate removal of hazardous wastes would be promptly assessed. The other sites would be assessed as soon as practicable.
- --EPA would issue guidance and provide training to the federal agencies on how to perform preliminary assessments.
- --Federal agencies would provide for the performance of preliminary assessments, including site inspections if necessary.
- --Federal agencies' annual budget requests would include funds for their site assessment activities, and those budget requests would be reported to EPA pursuant to OMB Circular No. A-106.
- --EPA would conduct such reviews of federal agencies' site assessment activities as necessary to ensure that all federal hazardous waste sites are adequately assessed.
- --Federal agencies would fund those actions for which they are responsible through reprogramming of appropriated funds. If this was not possible, the CERCLA fund would be used and later reimbursed by the federal agency. This option would be unavailable for remedial actions on federal lands because CERCLA prohibits the use of CERCLA funds for this purpose.
- --EPA would conduct such reviews of federal agencies' cleanup actions as necessary to ensure that the imminent hazard was removed.
- --Federal agencies would develop plans for remedial actions at sites which do not require immediate action in accordance with the NCP.

- --Federal agencies would evaluate cleanup alternatives on a case-by-case basis in consultation with EPA and state and local agencies.
- --EPA would conduct such reviews of federal agencies' remedial activities as required to ensure that all federal hazardous waste sites are being adequately cleaned up. EPA would comment on project priorities through the Circular A-106 mechanism.
- --Federal agencies would maintain multi-year fiscal plans pursuant to Circular A-106 for funding hazardous waste site identification, assessment, and cleanup activities.
- --EPA would monitor federal agencies' fiscal plans on a continuing basis and advise the federal agencies and OMB on needs for additional funding for identification, assessment, and cleanup of hazardous waste sites through reprogramming of appropriated funds, by requesting supplemental appropriations, or through the normal appropriations process.

We discussed this strategy document with both EPA regional office and federal agency officials at their headquarters and selected regional/field offices. Their comments on the strategy are discussed in appendix III.

Although EPA's Assistant Administrator for External Affairs and Assistant Administrator for Solid Waste and Emergency Response believed that the strategy provided the framework to exercise EPA's authority, EPA's General Counsel raised several areas of concern related to EPA's authority to ensure that federal agencies clean up inactive hazardous waste sites on federal land. In a February 28, 1984, memorandum to the Assistant Administrator for Solid Waste and Emergency Response, the General Counsel analyzed the following issue:

"Does EPA have authority to ensure that federal agencies promptly clean up those inactive hazardous waste sites on their lands which may present a hazard to human health or the environment? In particular, does EPA have the authority to: (1) review and approve another agency's priorities for cleanup (<u>i.e.</u>, which sites are cleaned up first), and (2) review and approve another agency's selection of cleanup remedies for its sites?"

In responding to these questions, the General Counsel believed, based on his review of EPA's authorities under CERCLA, Executive Orders 12088 and 12316, RCRA, and Section 309 of the Clean Air Act, that EPA's authority to approve another federal agency's cleanup priorities and choice of remedy for each site was unclear. He added that ſ

"Although we might be able to argue that one or more of these authorities gives EPA certain oversight responsibilities over federal facility cleanups, and unilaterally impose our oversight based on this authority, other agencies will be more cooperative if our respective roles are defined ahead of time. To the extent the Agency will be relying on these authorities to implement the CERCLA federal facilities policy--and it appears that it will--it is advisable that these authorities be clarified before, or simultaneously with, the implementation of the policy."

To clarify these authorities to ensure that the strategy could be effectively implemented, he advised that EPA could either negotiate a memorandum of understanding with each agency spelling out its responsibilities and providing a dispute resolution mechanism or EPA could seek amendments to either executive order giving EPA explicit oversight authority over cleanup of federallyowned facilities.

During our mid-June 1984 meetings with EPA's Assistant Administrator for External Affairs and Assistant Administrator for Solid Waste and Emergency Response, both officials disagreed with the General Counsel's opinion that either separate memoranda of understandings or amendments to the executive orders were advisable. The Assistant Administrator for Solid Waste and Emergency Response did believe, however, that some agencies, such as DOE and DOI, may warrant the negotiation of an individual memorandum of understanding to govern their CERCLA activities. The officials informed us that individual meetings with the various agencies (to take place in July-August 1984) and the support provided by OMB will convince the agencies of EPA's authority to implement the strategy under existing executive orders. The results of these meetings should, in their opinion, affect the agencies' fiscal year 1986 budgets.

Federal locations to be included on the National Priorities List

EPA announced in the September 8, 1983, Federal Register its intention to list federal facility sites on the CERCLA-mandated National Priorities List. Because the NCP currently prohibits the inclusion of these sites, EPA also intends to modify the plan to allow for the inclusion of federal facilities. An official from EPA's Discovery and Investigation Branch estimated that both the listing of proposed federal facility sites and the proposal to modify the NCP will occur in the fall of 1984.

This official informed us in late June 1984 that candidate federal facility locations which have been nominated by EPA or the states were being scored using EPA's Hazard Ranking System. As a result, this official could not comment on the exact number that may be proposed for inclusion on the National Priorities List. He did inform us, however, that he believed most will be DOD locations, not civilian agency locations. He estimated that about 65 federal facility locations will be scored, with 6 or 7 belonging to civilian agencies, and that about 35 to 40 federal facility locations may be proposed for inclusion on the National Priorities List, with 3 to 5 belonging to civilian agencies.

RCRA Section 3012 activities

Another EPA activity that is now underway and will result in additional assessment activities at federal agency locations is EPA's RCRA Section 3012 program. In October 1982, the Congress appropriated \$10 million as a one-time, nonrecurring appropriation to assist the states in completing the site survey and inspection process as authorized under RCRA Section 3012. On February 7, 1983, EPA published the Federal Register notice implementing the program, including identifying allowable activities and their related priorities. These activities are, in priority order, preliminary assessments, site inspections, responsible party searches, discovery, and site inspection follow-up. In March 1983, EPA estimated that as many as 9,000 preliminary assessments remained to be performed nationwide.

EPA headquarters officials were not aware of the extent to which the RCRA Section 3012 program was being used to conduct site assessment and evaluation activities at civilian federal agency locations. The EPA regions have had varied experiences with the RCRA Section 3012 program, as it relates to civilian federal agencies, as follows:

- --In EPA Regions I and II, all states have accepted the RCRA Section 3012 funding. In region II, one potential federal agency location was identified in New Jersey.
- --In region III, the states were concentrating on private locations, not federal ones. The states, according to regional office officials, were relying on EPA to deal with federal problems.

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- --In region IV, the states were directed by regional office officials not to use RCRA Section 3012 funding at federal locations.
- --In region V, the states have used or plan to use the funding to perform both preliminary assessment and site discovery activities at some federal locations.
- --In region VI, one federal location has been scheduled for a preliminary assessment using the RCRA Section 3012 funding.
- --In region VII, there were no planned activities involving federal locations.

- --In region VIII, the states plan to use the RCRA Section 3012 funding to conduct preliminary assessments at some federal locations.
- --In region IX, California and Nevada had budgeted RCRA Section 3012 funding for federal locations. One additional federal location was identified in the region.
- --In region X, Alaska, Idaho, and Washington had budgeted RCRA Section 3012 funding to conduct preliminary assessments at federal locations.

Agencies' recent assessment, evaluation, and cleanup initiatives

As was the case with site identification initiatives, we noted that three agencies--DOE, DOI, and NASA--have new efforts underway or planned that will address the site assessment, evaluation, and/or cleanup of hazardous waste site locations on their lands. Because these efforts will take place in the future, it was too early to evaluate whether they will be successful. However, these three agencies have recognized the potential problems they face and were attempting through these new efforts to focus agency attention on them.

DOE

In appendix I we discuss DOE's draft order 5480--program guidance for CERCLA--which will provide guidance and instructions for implementing DOE's CERCLA program to define actions to identify and evaluate inactive hazardous waste disposal sites and effect remedial actions to control the migration of hazardous substances resulting from such sites. The program will be structured into five phases. The first phase--installation assessment--is discussed in appendix I. The remaining four phases, with projected completion dates as shown in the draft order, are shown below.

Phase II--Confirmation: To quantify, by preliminary and comprehensive environmental survey, the presence or absence of hazardous substances that may have an undue risk to health, safety, and the environment. Projected completion is December 1986.

Phase III--Engineering Assessment: To develop, evaluate, and recommend a plan for controlling the migration of hazardous substances or effecting remedial actions at the installation. Projected completion is December 1988.

Phase IV--Remedial Actions: To implement the recommended site-specific remedial measures identified in phase III. This includes the engineering, design, and actual construction of barriers to restrain migration of identified hazardous substances or decontamination operations. Projected completion is within 10 years. Phase V--Compliance and Verification: To prepare remedial action documentation and establish any monitoring requirements. Projected completion is within 10 years.

We also were informed that DOE's Albuquerque Operations Office was developing a comprehensive environmental assessment program which included site identification, confirmation, technological assessment, remedial action, and compliance and verification for its hazardous waste site locations.

DOI

DOI's Office of Policy, Budget, and Administration requested in May 1983 that all DOI bureaus and services develop programs and procedures tailored to meet their needs to ensure that CERCLA responsibilities are fully met. The program would include procedures for hazard ranking, remedial investigation, and remedial action at DOI's hazardous waste site locations. In May 1984, the Secretary, as part of his budget formulation process for fiscal year 1986, requested from each bureau and service information on (1) the number of sites that have been ranked and will be ranked in the future using EPA's hazard ranking system, (2) the number of remedial investigation plans prepared and that will be prepared in the future, and (3) the number of remedial investigation plans for which remedial actions have been completed in the future. While funding information was still being developed, some bureaus and services did have estimates of potential program costs. For example, the Bureau of Land Management estimated \$1.3 million annually to develop a program and policies for hazardous waste control and to begin identification, evaluation, and remedial actions at 22 waste sites. The Bureau of Indian Affairs estimated \$7 million to test and clean up 14 identified sites.

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NASA

NASA began a 12-month pilot project in September 1983 at the Kennedy Space Center as the basis for NASA plans to evaluate the past use and hazardous substances disposal practices at each of its centers and to determine the potential for these substances to migrate off-site. Based on the outcome of this effort, NASA plans to conduct at least the initial assessment--records search, interviews, and limited analysis--at all of its major centers within the next 3 years.

DOD's formerly-used site program

As was discussed in chapter 2, the COE has started to compile an inventory of formerly-used DOD sites that may be eligible for cleanup action under DOD's environmental restoration program. During discussions with federal agency regional/field office officials, we determined that there were no locations from our known universe of 340 that DOD had decided (at the time of our review) to address under the program.

Legislative proposals

Increased awareness of potential problems posed by federal facilities has resulted in legislation introduced in the 98th Congress to amend CERCLA to establish certain requirements with respect to hazardous substances released from federal facilities. H.R. 4760 was introduced on February 6, 1984, and a companion bill, S. 2407, was introduced on March 12, 1984. The following major provisions are included in these bills:

- --EPA must publish in the Federal Register all releases or threatened releases from any federal vessel or facility and establish a publicly available Federal Agency Hazardous Waste Compliance Docket, which includes the Federal Register notice and describes the actions taken by EPA in response to the release or threatened release.
- --EPA must publish in the Federal Register within 270 days a detailed proposal for taking action at a facility, including a proposed interagency agreement for the action or the reasons why such an agreement was not developed. The public may submit written comments on the proposed agreement. Then, EPA has 90 days to either publish a final agreement or take appropriate action under Sections 104, 106, or 107 of CERCLA.
- --EPA must submit annual reports to the Congress on the progress in reaching interagency agreements, specific cost estimates and budgetary proposals involved, a brief summary of public comments regarding each proposed agreement, and a description of instances in which no agreement was reached.
- --Citizen suits against either the involved federal agency or EPA would be allowed.
- --The President must publish, within 90 days, a schedule for including federal facilities on the National Priorities List.

EPA officials offered varied comments on this proposed legislation. For example, the Assistant Administrator for External Affairs did not believe legislation was needed because, in her opinion, the federal facilities program was already receiving adequate attention through EPA's strategy to assure federal facilities' compliance with CERCLA. Officials in EPA Regions VI and VII were unaware of the proposal but had positive reactions after reading it. The Superfund Branch Chief in region VI noted that the proposal reinforced certain powers that EPA already has in his opinion. He particularly liked the authority given to EPA under sections 104, 106, or 107 of CERCLA. In region VII, the Chief, Waste Management Branch, believed that the proposal's penalty provisions under Sections 104, 106, and 107 conflicted with existing DOJ policy and Executive Order 12088, which, in his opinion, prohibits executive agencies from suing sister agencies. He also believed that the proposal should include additional resources for EPA to carry out the various provisions.

CONCLUSIONS

Actions taken at 340 federal agency hazardous waste site locations range from about 21.5 percent that have been assessed, evaluated, and/or cleaned up and require no further action to the remaining 78.5 percent that have either not been addressed at all or require additional assessment, evaluation, and/or cleanup action. We found that EPA's information on the status of actions taken was generally limited to those locations that were in the ERRIS data base, and, even in many of these cases, the ERRIS data did not reflect actual activity performed. Also, federal agency officials cited a number of factors to explain why needed site actions have not been completed, including limited resources, guidance, and training or the overall belief that the locations presented minimal environmental and/or public health threats.

EPA, DOE, DOI, and NASA have initiated new activities aimed at site assessment, evaluation, and cleanup of federal hazardous waste site locations. We believe that EPA's strategy to assure federal facilities' compliance with CERCLA has the potential to focus the federal government's attention on hazardous waste site problems. Whether this potential is realized depends on the strategy's future implementation and whether it can overcome the problems identified by federal agencies and EPA regional offices, such as the resources available to the agencies and the extent of guidance, direction, and training provided to the agencies by EPA.

EPA regional offices have not been keeping ERRIS information up to date and accurate. This situation resulted because the individual EPA regional offices assigned different priorities to inputting or updating ERRIS data and were selective in the types of data updated.

We believe that ERRIS will become more important in the future as EPA begins to implement its new CERCLA strategy for federal facilities. Unless ERRIS accurately reflects all potential hazardous waste sites identified on federal lands and the extent of both EPA's and federal agencies' actions to address those sites, EPA may find it difficult to fulfill its roles and responsibilities under the strategy to (1) ensure that hazardous waste sites are identified, assessed, evaluated, and, if warranted, cleaned up and (2) provide advice to the federal agencies and OMB on future funding needs. Therefore, we believe that EPA needs to update and correct the information contained in ERRIS so that the system accurately reflects the status of actions at federal hazardous waste site locations.

RECOMMENDATION TO THE ADMINISTRATOR, EPA

In chapter 2, we concluded that improvements to the ERRIS data system, related to the identification of potential uncontrolled hazardous waste sites on federal lands, were needed and recommended that the Administrator, EPA, instruct the EPA regional offices on the importance and need for complete and accurate information on potential hazardous waste site locations on federal lands. We further recommend that these instructions should also require regional offices to update and correct the ERRIS data base to show the current status of site assessment, evaluation, and corrective actions that have been taken at federal agency locations.

AGENCY COMMENTS AND OUR EVALUATION

We requested and received comments on a draft of this report from EPA and the 15 agencies mentioned in the report (see apps. VI to XX).

EPA agreed that it was important to keep accurate and complete information in ERRIS. EPA stated that the Assistant Administrator for Solid Waste and Emergency Response wrote to each EPA region in May 1984 and ". . . stressed the need for timely entry of completions of Preliminary Assessments and Site Investigations into the data base." We agree with the need for timely input of ERRIS information and continue to believe that the EPA regional offices need to update and correct the ERRIS data base to show the current status of site assessment, evaluation, and corrective actions that have been taken at federal agency locations. This information will become important as EPA begins to implement its new strategy to assure federal facilities' compliance with CERCLA since it will show the extent to which hazardous waste site locations (on federal lands or under the control of federal agencies) have been or are being addressed.

Additional comments were provided by 14 other agencies. These comments generally stated that the report correctly described the agency's hazardous waste site efforts and/or helped to clarify some of the issues discussed in this report. Their comments have been included in the report where appropriate. DOE provided oral comments, through its Director, Office of Operational Safety, and stated that it had no substantive comments to make on the report's information related to DOE.

EFFORTS OF 16 FEDERAL AGENCIES TO IDENTIFY

POTENTIAL HAZARDOUS WASTE SITES

AT THEIR LOCATIONS OR UNDER THEIR CONTROL

The extent of 16 federal agencies' efforts to identify potential hazardous waste sites at their locations or under their control can be divided into three parts: (1) CERCLA Section 103(c) notification efforts, (2) other efforts initiated after the CERCLA notification requirement in June 1981 but before February 1984 when we started this review, and (3) new initiatives ongoing after February 1984 or planned for the future. This appendix discusses the site identification efforts of each agency in these three areas.

U.S. ARMY CORPS OF ENGINEERS

CERCLA Section 103(c)

COE headquarters issued guidance dated May 28, 1981, to its division offices on the notification requirement. We were able to identify two COE sites for which a notification was made. COE headquarters officials from the Directorate of Civil Works had no information on the number of notifications made COE-wide. Also, they were unaware of the two notifications made. The COE offices, in their opinion, probably reported the sites directly to EPA regional offices and not to COE headquarters.

Concerning the two notifications, the COE's Little Rock, Arkansas, District issued an instruction to its field offices to comply with the reporting requirement. The district and its field offices relied upon their knowledge of the local areas to determine whether potential sites existed and reported one potential site. Similarly, COE officials at the St. Paul, Minnesota, District were also aware of the requirement and reported one potential site. While the Minnesota District officials stated that they viewed the reporting requirement as a continuing effort, an Arkansas District official believed that the notification process was a one-time reporting requirement.

Other efforts

None.

New initiatives

None.

DEPARTMENT OF COMMERCE

CERCLA Section 103(c)

DOC did not report any sites to EPA under CERCLA Section 103(c). Headquarters officials, including the Superfund Program Manager from DOC's National Oceanic and Atmospheric Administration, informed us that guidance was not sent to any of DOC's bureaus, administrations, or field components on this requirement.

Other efforts

None.

New initiatives

DOC, through its National Oceanic and Atmospheric Administration, requested on May 25, 1984, information from all of its organizational components to determine if they have any hazardous material sites or knowledge of releases of hazardous materials at any of their locations and to document their findings and report by August 1, 1984.

DEPARTMENT OF ENERGY

CERCLA Section 103(c)

We were able to identify 12 DOE CERCLA Section 103(c) notifications made to EPA. DOE headquarters issued guidance dated May 14, 1981, to its field components notifying them of the reporting requirement. Headquarters officials, including the Director, Office of Operational Safety, informed us that there were probably other sites that were not identified because DOE officials both at headquarters and in the field did not have a good working knowledge regarding what qualified as a potential CERCLA Section 103(c) site. Furthermore, the officials stated that at that time DOE was contending that its facilities were exempt under the Atomic Energy Act and that RCRA had no applicability to these facilities. Therefore, since the reporting requirement was for RCRA-defined hazardous wastes, DOE believed it did not have to report anything. This confusion was evident because some of DOE's field components did complete notifications and sent them to DOE headquarters, but headquarters officials decided not to submit the forms to EPA because of the RCRA controversy.

Officials from DOE'S Albuquerque Operations Office and the Chicago Operations Office informed us that they received direction from DOE headquarters on the reporting requirement. They, in turn, provided the guidance to field offices. The Albuquerque Operations Office relied on the facility contractors' knowledge of past site activities to determine if any potential sites existed. One site was identified and reported to EPA by the Albuquerque Operations Office, which considered the requirement to be on-going, and six sites were reported to EPA by the Chicago

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"The Department is implementing an aggressive program to improve its understanding and management of all active and inactive hazardous waste sites and to identify and evaluate all sites which may not meet present-day standards and which may impact the environment or become a public health or safety issue. With the completion of site identification and risk assessment activities and the establishment of priorities in FY 1985, detailed studies will begin in FY 1986 to determine the nature and extent of any indicated remedial measures."

During early 1984, DOE's Albuquerque Operations Office developed a comprehensive environmental assessment program to systematically identify and assess the potential for hazardous waste sites at the eight DOE facilities under its jurisdiction. The program has five phases--the first phase is an installation assessment. This phase includes a review of existing data, interviews, and physical surveys. The remaining phases include confirmation (site investigation), technological assessment, remedial action, and compliance and verification. Funds for the installation assessments have been planned and budgeted out of operating accounts.

In March 1984, DOE'S Strategic Petroleum Reserve contractor submitted a hazardous waste site identification plan to DOE'S New Orleans Project Management Office for review. The plan involves a three-phased approach to assess sites for evidence of past hazardous waste activity. The first phase involves a review of existing records, data, and resources in an effort to identify past land uses and specific practices. The remaining two phases involve sampling, visual surveys, and surface and ground water monitoring. The plan had not been implemented during our field work.

DOE officials in EPA Regions IX and X stated that they have made efforts to identify sites, including searching historical records to determine what is buried at sites, continuing monitoring at sites, and searching for people who might know of old sites on lands previously owned by others. Recently, one office sent a memorandum to its regional operations area managers to identify sites by talking to employees and searching records.

In addition to these efforts, the Environmental Activities Director of the Savannah River Office informed us that the Office's environmental action plan is updated annually, including discussions with the prime contractor on any potential CERCLA sites not previously identified.

New initiatives

In 1983, DOE began to emphasize the need for a DOE-wide program to deal with hazardous waste problems at DOE facilities. As mentioned previously, DOE had taken a number of actions to implement its program prior to the start of this review. Since our

review began in February 1984, DOE had initiated two major actions. The first was DOE's continuation of its activities to identify inactive hazardous waste sites. The results of these activities, in the form of a consolidated list of DOE's inactive waste sites, were formally transmitted to EPA's Assistant Administrator for Solid Waste and Emergency Response by DOE's Assistant Secretary for Policy, Safety, and Environment on May 31, 1984. The list included sites previously reported to EPA under CERCLA Section 103(c), new sites reported to DOE headquarters by field offices, and sites contained in EPA's ERRIS (some of which DOE recommended for deletion because there was no evidence, in DOE's opinion, of an inactive waste site). According to DOE officials, including the Director, Office of Operational Safety, this list represented, to the best of their knowledge, all potential DOE sites.

As a second major action, DOE has developed a draft order on program guidance for CERCLA. DOE's Director, Office of Operational Safety, provided us a copy of the draft order on June 7, 1984. The purpose of the draft order is to provide guidance and instructions for implementing a DOE CERCLA program to (1) define actions to identify and evaluate inactive hazardous waste disposal sites and (2) effect remedial actions to control the migration of hazardous substances resulting from such sites. DOE's program will be structured into five phases with the first being installation assessment, which is designed to locate and identify those inactive hazardous waste disposal sites that may pose an undue risk to health, safety, and the environment as a result of migration of hazardous substances. DOE estimated that this phase would be completed by December 1985. The Director, Office of Operational Safety, estimated that this draft order will become final by September 30, 1984.

DEPARTMENT OF THE INTERIOR

CERCLA Section 103(c)

DOI had 21 locations reported under CERCLA Section 103(c). DOI's Office of Environmental Project Review sent guidance in April 1981 to eight DOI bureaus/services notifying them of this requirement. Only five of the eight--Bureau of Reclamation, Bureau of Land Management, Bureau of Mines, Fish and Wildlife Service, and National Park Service--subsequently notified their field organizations about this requirement, with two of the five--Fish and Wildlife Service and National Park Service-notifying their field organizations after June 9, 1981.

Officials from DOI's field offices had varying knowledge about the CERCLA Section 103(c) requirement and what was done to comply with it. For example, although DOI's Office of Environmental Project Review issued guidance on the requirement in April 1981, we found that the field offices, in some cases, were either unaware or vaguely aware of the requirement. We found in other cases that the field offices had reported sites under the

requirement. The field office officials offered several reasons why they lacked information on the process. For example, there had been changes in personnel or they could not recall whether information was submitted to the regional or headquarters offices.

Other efforts

The Director of DOI'S Office of Environmental Project Review informed us that two additional site identification efforts took place after the CERCLA Section 103(c) notification requirement had passed. The first involved a May 5, 1983, request from his office to DOI's bureaus/services to check all sites reported on EPA's ERRIS data system for sites that may affect their lands, resources, or programs. In addition, DOI, in November 1983 in response to congressional inquiries, identified 129 sites on DOI lands that had problems or suspected problems (related to hazardous materials, fuel dumps, and abandoned structures and debris) that had resulted from DOD's former use of the lands. As a result of both efforts, DOI compiled an inventory of 255 potential sites as of April 3, 1984.

Apart from the two efforts identified by the Director, Office of Environmental Project Review, DOI's field offices had not initiated any independent site identification efforts. Field office officials, such as the Hazardous Waste Coordinator for the Bureau of Reclamation's Upper Missouri Regional Office, informed us that new sites were usually discovered during normal operations. Some of these officials stated that potentially more sites could exist on DOI lands but that such sites would not be detected under normal operations. They believed that only a concerted effort would identify these additional sites. However, because field staff were not hazardous waste experts and funding has not been appropriated for the specific purpose of identifying sites, these undiscovered sites, in their opinion, will remain undetected until future problems arise.

New initiatives

As part of its budget justification process for fiscal year 1986, DOI has continued efforts concerned with compliance with CERCLA. In May 1983, the Assistant Secretary for Policy, Budget, and Administration requested that all DOI bureaus and services develop programs and procedures tailored to meet their needs to ensure that CERCLA responsibilities are fully met. The program would include, among other things, site inventory procedures. In May 1984, the Secretary of DOI, as part of his fiscal year 1986 budget formulation process, requested from each bureau and service a number of items in the site inventory category, including the total number of acres they will inventory, the percentage of bureau lands already inventoried to date, the number of known inactive sites, and the month and year all inventories will be completed.

APPENDIX I

DEPARTMENT OF JUSTICE

CERCLA Section 103(c)

DOJ did not report any sites to EPA under CERCLA Section 103(c). Officials from DOJ's Office of Facilities Management and the Bureau of Prisons' Office of Safety and Environmental Health Programs were either unaware or vaguely familiar with the requirement, but neither organization had provided any guidance to their field components on this subject. The Bureau of Prisons officials informed us, however, that in the past there were probably about 30 prison facilities in the United States where industrial-type operations were common. Although waste disposal, according to the officials, is now contracted out to private firms, the officials stated that in the past each of the prison facilities probably had a landfill on prison land where wastes from prison operations, including industrial operations, were probably disposed of. These officials stated that to their knowledge, no attempts have been made in the past to determine whether such potential sites do or do not exist.

A DOJ official in EPA Region IX indicated that he was unaware of the 103(c) reporting requirement, did not receive guidance from headquarters, and did not report any sites. He did state, however, that it probably should be a continuing reporting effort.

Other efforts

A Bureau of Prisons official at the Lompoc Penitentiary in EPA Region IX informed us that in the past long-term field personnel had been asked if they were aware of sites, but no sites were identified.

New initiatives

None.

DEPARTMENT OF TRANSPORTATION

CERCLA Section 103(c)

DOT had nine locations reported under CERCLA Section 103(c). These locations were reported as a result of efforts by the U.S. Coast Guard which sent the 103(c) notification requirement guidance to its field facilities. DOT's Office of the Secretary was not aware that these sites were reported since it had not provided guidance to its administrations on the notification requirement. An Office of the Secretary official told us that little action was taken, other than by the Coast Guard, to comply with the requirement because, in his opinion, (1) DOT did not have potential hazardous waste sites, (2) very little hazardous waste could exist that was not covered under other environmental acts, and (3) the administrations should have noticed the requirement and acted accordingly since it was published in the Federal Register. U.S. Coast Guard district office officials, such as the 5th and 9th districts, informed us that they had received a May 20, 1981, message from Coast Guard headquarters notifying them of the CERCLA notification requirement. The field offices were required to ensure that all Coast Guard units complete a notification form for any identified sites and forward them to the appropriate EPA region. For example, at one Coast Guard facility in the 5th district, the property was visually inspected and a problem was identified with improper storage of batteries. In total, the Coast Guard reported nine locations under the section 103(c) requirement.

Other efforts

The U.S. Coast Guard's 7th District Planning Officer informed us that there have been some major efforts to identify past hazardous waste sites since 1982. These efforts, including a 1982 program to identify, assess, and evaluate polychlorinated biphenyl sites and a 1982 and 1983 program to identify, assess, and evaluate sites with hazardous battery waste, did not identify any additional sites.

New initiatives

DOT has initiated a new effort to identify potential past hazardous waste sites. The Office of the Secretary on March 22, 1984, sent a memorandum to four DOT organizations, such as the Federal Aviation Administration, requesting that they provide information to demonstrate compliance with RCRA and CERCLA. The Office of the Secretary gave the administrations until June 1, 1984, to respond. As of June 26, 1984, only one organization, the Research and Special Programs Administration, had completed its effort and reported to the Office of the Secretary that a minor potential problem existed with transformers containing polychlorinated biphenyls at one of its offices. In the past this office had experienced some leakage from such transformers and had taken cleanup action.

In its comments, dated September 10, 1984, on a draft of this report, DOT stated that five administrations have since responded to the RCRA and CERCLA survey and that no abandoned or uncon-trolled hazardous waste site locations were reported.

ENVIRONMENTAL PROTECTION AGENCY

CERCLA Section 103(c)

EPA had two of its laboratory facilities file 103(c) notifications. The Chief of EPA's Discovery and Investigation Branch believed that both notifications were for protective purposes since, in his opinion, neither laboratory generated sufficient hazardous waste to justify a notification. The notification for one of the EPA sites was later deleted by EPA regional office officials because it was believed to have been filed in error. EPA headquarters did not issue any guidance to EPA laboratories describing the notification process. EPA headquarters assumed that the laboratories would be aware of the requirement since it was published in the Federal Register.

Other efforts

None.

New initiatives

None.

GENERAL SERVICES ADMINISTRATION

CERCLA Section 103(c)

Although one GSA location was reported as a CERCLA Section 103(c) notification, GSA headquarters officials, including the Acting Director, Environmental Affairs Staff, were unaware of the notification. According to these officials, GSA did notify its regional offices on May 22, 1981, of the requirement and advised them to report any potential sites directly to the appropriate EPA regional office. These officials had received no information on what sites were reported.

According to the GSA Region IV (Atlanta, Georgia) Chief of the Accident and Fire Prevention Branch, he was aware of the 103(c) requirement. He informed us that the 22 field offices in the region made a survey (primarily consisting of discussions with current employees and observations during routine health and safety inspections) and found one site which was reported.

Other efforts

GSA headquarters officials, including the Acting Director, Environmental Affairs Staff, informed us that no efforts had been taken since the CERCLA June 1981 notification requirement but that before June 1981 GSA had initiated, in November 1978, a nationwide survey of inactive hazardous waste sites on its Public Buildings Service lands. Headquarters officials, however, could not locate the results of this survey or provide any other information on whether any sites were identified.

New initiatives

None.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

CERCLA Section 103(c)

HHS did not report any sites to EPA under CERCLA Section 103(c). HHS headquarters officials from the Office of Facility

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Engineering and Office of Safety and Health told us that they were aware of the requirement but had not issued any guidance to HHS field organizations because they had received no guidelines from EPA regarding the requirements. However, an HHS official from the Office of Safety and Health informed us that he made selective telephone calls to the HHS organizations with potential for sites to see if any such sites could exist and that officials informed him that none existed. The National Institutes of Health was the only component of HHS which had made a formal, independent attempt to identify such sites as a result of the 103(c) notification requirement. The other agencies relied on knowledge of current practices and institutional memory to make a negative reply. The National Institutes of Health's Environmental Protection Branch did not identify any sites as a result of identification efforts, which consisted of record searches to identify past disposal practices, interviews of employees, site visits, and soil samples.

Other efforts

None.

New initiatives

HHS issued a circular, dated March 21, 1984, that informed operating divisions that they were required to ensure that facility managers take necessary actions to identify any past or present hazardous waste sites and assess, report, and correct any problems associated with such sites. The surveys to identify such sites were to be completed by June 29, 1984. An HHS official from the Office of Facility Engineering informed us on June 28, 1984, that only the National Institutes of Health had responded and this response was based on the National Institutes of Health's earlier discussions with us. The circular did not require a negative report, however.

The Chief of the National Institutes of Health's Environmental Protection Branch informed us that his office was in the study stage of developing an environmental auditing program that would address identifying past hazardous waste sites.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

CERCLA Section 103(c)

HUD did not report any sites to EPA under CERCLA Section 103(c). HUD officials from the Office of Environment and Energy informed us that they were aware of the requirement but had not issued any guidance to HUD's field organizations. Instead, HUD officials stated that a telephone survey of HUD's regional offices was made to determine whether such potential sites could exist. Because replies to this telephone survey were negative, HUD officials believed that there was nothing more to do. These officials also believed that the nature of HUD's operations precluded it from having potential sites located on its property.

Other efforts

None.

New initiatives

None.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

CERCLA Section 103(c)

Although one NASA location was reported as a CERCLA Section 103(c) notification, NASA headquarters officials from the Facilities Engineering Division were unaware of this notification. These officials added that NASA headquarters did not issue any guidance to its field organizations and stated that the requirement was just missed by headquarters.

NASA field office officials from Marshall Space Flight Center, Mississippi Ammo Plant, and Langley Research Center informed us that they were not fully aware of the CERCLA Section 103(c) requirement and, as such, made no specific attempts to identify sites. However, one known sanitary landfill site at the Kennedy Space Center was reported.

Other efforts

None.

New initiatives

In September 1983, NASA began a 12-month pilot project at the Kennedy Space Center in Florida to identify past hazardous waste problems. This project is the basis of NASA's plans to evaluate the past site use and hazardous substances disposal practices at each of its centers and to determine the potential for these substances to migrate off-site. Based on the outcome of this pilot effort, NASA's Deputy Associate Administrator for Management informed EPA's Assistant Administrator for Solid Waste and Emergency Response on October 20, 1983, that NASA planned to conduct an initial survey at all of its major centers within the next 3 years.

The NASA Langley Research Center on April 25, 1984, through an independent initiative, sent a memorandum to all employees asking if they were aware of any sites where hazardous material had been disposed of in the past. An official from the Center's System Safety Quality and Reliability Office informed us on May 30, 1984, that this effort had not resulted in any sites being identified.

U.S. POSTAL SERVICE

CERCLA Section 103(c)

USPS did not report any sites to EPA under CERCLA Section 103(c). USPS officials, including the Director, Office of Fleet Management, informed us that they were unaware of this requirement and, therefore, had not issued any guidance related to it. The USPS officials believed, however, that the nature of the Postal Service's operations precluded it from having potential sites located on its property.

Other efforts

None.

New initiatives

None.

DEPARTMENT OF THE TREASURY

CERCLA Section 103(c)

The Department of the Treasury did not report any sites to EPA under CERCLA Section 103(c). Headquarters officials, including the Environmental Coordinator within the Physical Security Division, informed us that they were unaware of this requirement and, therefore, had issued no guidance related to it. The headquarters officials believed, however, that the nature of the Department's operations precluded it from having potential sites located on its property.

Other efforts

None.

New initiatives

None.

TENNESSEE VALLEY AUTHORITY

CERCLA Section 103(c)

One location was reported to EPA under CERCLA Section 103(c). This location was formerly operated by the Department of the Army and is now on TVA's property. The Department of the Army reported the TVA site using the CERCLA Section 103(c) notification form. TVA headquarters officials, including the Staff Assistant to the TVA General Manager, were aware of the requirement and had issued guidance to TVA field components in May 1981 to determine the existence of potential sites. Because the field components found no sites, none were reported to EPA other than the one TVA location reported by the Department of the Army.

Other efforts

None.

New initiatives

None.

U.S. DEPARTMENT OF AGRICULTURE

CERCLA Section 103(c)

Although EPA headquarters information indicated that one USDA location was reported as a CERCLA Section 103(c) notification, USDA headquarters officials, including the Deputy Chief, Real Property Management Division, were unaware of this notification. These officials added that USDA headquarters was unaware of the CERCLA notification requirement; therefore, USDA did not issue any guidance to its field organizations on this requirement, nor did its Agricultural Research Service or Forest Service.

The one USDA site reported was the Metabolism and Radiation Research Laboratory in Fargo; North Dakota. However, officials in the USDA field office could not provide any information on how the site was reported--they had no record of a 103(c) notification being sent from their office.

Other efforts

None.

New initiatives

None.

VETERANS ADMINISTRATION

CERCLA Section 103(c)

VA had one location reported to EPA under CERCLA Section 103(c). VA headquarters officials, including the Director, Office of Engineering Services, informed us that they were unaware of this site or this notification requirement, and had issued no guidance to VA field offices.

The Omaha, Nebraska, Medical Center identified the requirement through reviewing the Federal Register and relied upon the knowledge of its long-time employees and its Safety and Radiological Specialists to determine if there were potential sites. No sites were identified by medical center officials. They believed that the 103(c) requirement was a one-time reporting effort. On the other hand, the VA medical center in Hot Springs, South Dakota, became aware of the reporting requirement as a result of discussions with EPA Region VIII officials and reported one location where a spill of hazardous substances had occurred.

Other efforts

None.

New initiatives

Although VA headquarters officials believed that potential hazardous waste sites do not exist on VA lands, they were not certain because prior identification efforts had not been performed. To remedy this situation, VA has developed a questionnaire to be administered to each of VA's 172 medical centers to determine whether there are, or have been, any hazardous waste problems. Each medical center will conduct a self-assessment of past and present waste disposal practices. VA sent this questionnaire out on July 31, 1984, and plans to analyze and review the responses by early fall 1984.

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NUMBER OF POTENTIAL FEDERAL AGENCY HAZARDOUS WASTE

SITE LOCATIONS BY EPA REGION AND STATE

	Number of		Number of
NDA Decies T	locations	EDA Dogion WT	<u>locations</u>
EPA Region I Connecticut	0	EPA Region VI Arkansas	1
Maine	0	Louisiana	1
Massachusetts	1	New Mexico	2 4
	1	Oklahoma	
New Hampshire Rhode Island	0	Texas	6
	4	Subtotal	$\frac{6}{14}$
Vermont Subtotal	<u>0</u>		14
	0	EPA Region VII	1
EPA Region II	1 1	Iowa	1
New Jersey New York	13	Kansas Missouri	0 3
Puerto Rico	14		
	3	Nebraska	$\frac{1}{5}$
Virgin Islands	<u>0</u> 30	Subtotal	S
Subtotal	30	EPA Region VIII	-
EPA Region III		Colorado	7
District of Columbia	1	Montana	4 2 2 6
Delaware	0	North Dakota	2
Maryland	10	South Dakota	2
Pennsylvania	5	Utah	
Virginia	4	Wyoming	7
West Virginia	0	Subtotal	28
Subtotal	20	EPA Region IX	
EPA Region IV		Arizona	18
Alabama	2	California	46
Florida	8	Guam	1
Georgia	3	Hawaii	2
Kentucky	1	Nevada	51
Mississippi	3	Northern Marianas	
North Carolina	2	Trust Territories	A
South Carolina	3	Subtotal	127
Tennessee	3 2 3 <u>5</u> 27	EPA Region X	
Subtotal	27	Alaska	21
EPA Region V		Idaho	29
Illinois	3	Oregon	1
Indiana	0	Washington	<u>19</u> 70
Michigan	2	Subtotal	70
Minnesota	2		
Ohio	4	Total number	
Wisconsin	0 2 4 <u>2</u> 13	of locations	340
Subtotal	13		

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COMMENTS ON EPA STRATEGY TO ASSURE FEDERAL

FACILITIES' COMPLIANCE WITH CERCLA BY OFFICIALS

FROM EPA REGIONAL OFFICES AND FEDERAL AGENCIES

EPA has developed a strategy to assure federal facilities' compliance with CERCLA. The hazardous waste site identification component of the strategy is discussed on pages 18 to 20, while the assessment, evaluation, and cleanup components are discussed on pages 34 to 36. We discussed this overall strategy with EPA regional office officials and federal agency officials, who were generally unaware of the strategy. Their overall reaction to the strategy was that it provided the proper focus to the hazardous waste site issues facing federal agencies. The manner in which it would be implemented, including the availability of resources and the training, guidance, direction, and technical assistance EPA would provide, was the key question raised by the officials. This appendix provides a cross-section of the comments made by officials from EPA's regional offices and the federal agencies.

EPA REGIONAL OFFICES

In general, the 10 EPA regional offices were unaware of the EPA strategy document. However, we asked officials in each region to comment on the strategy. The following examples illustrate their comments:

- --EPA Regions I and II The major concern raised by regional officials was the need for additional resources to implement the strategy.
- --EPA Region III Officials, such as the Chief, Superfund Branch, and the Chief, Site Investigation and Support Section, believed that the strategy was a good concept and was needed to draw attention to federal facility problems. These officials and others also believed that additional regional office resources were needed to accomplish the strategy's goals.
- --EPA Region IV Officials, such as the Chief, Site Screening and Engineering Section, and the Chief, Emergency and Remedial Response Branch, believed that for the strategy to be a success, it would require a detailed memorandum of understanding or interagency agreement with each federal agency defining necessary identification actions and required documentation, with reporting to OMB and EPA.
- --EPA Region V The Chief, Remedial Response Branch, believed that the strategy was a good concept since it established a systematic approach for identifying, assessing, and cleaning up federal hazardous waste sites and also provided distinct roles for both EPA and federal agencies.

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However, he could foresee federal agencies experiencing funding problems. For example, federal agencies would be expected to fund their own cleanup activities and would likely have to allocate cleanup costs during their annual budget process, which creates two problems, in his opinion: (1) estimating how much cleanup activity will cost and (2) budget constraints for activities that involve no immediate threats to public health and welfare.

- --EPA Region VI An official believed that the strategy would improve federal facilities' compliance by encouraging agencies to establish systematic site identification programs. This official, however, anticipated that the regional office would experience problems implementing the strategy because of a lack of existing resources devoted to the identification of federal agency sites.
- --EPA Region VII An official believed that the strategy was needed to assure that site identification and assessment activities take place. This official also cited inadequate regional office resources devoted to this area as a probable hindrance to the strategy's implementation.
- --EPA Region VIII Officials believed that the strategy would better outline both EPA and agency responsibilities for addressing hazardous waste sites. These officials also stated that the existence of the strategy did suggest that EPA's prior attempts to gain federal agency compliance had been unsuccessful.
- --EPA Region IX Officials were either unaware or only vaguely aware of the strategy, but they believed that it was needed to improve site identification efforts by federal agencies and that it will shift the burden of site identification away from EPA and onto the agencies.
- --EPA Region X Officials were not aware of the strategy but stated that it was probably needed since there were problems in the past with compliance with CERCLA Section 103(c) and the A-106 guidance. However, they stated that additional resources would be required to implement a federal facilities program.

U.S. ARMY CORPS OF ENGINEERS

COE headquarters officials from the Directorate of Civil Works believed that EPA already had the authority to assure compliance with CERCLA and that the strategy was not needed. A COE district office official in EPA Region VII believed, however, that the strategy could provide federal agencies with a blueprint to guide them in identifying and evaluating hazardous waste sites.

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DEPARTMENT OF COMMERCE

The Superfund Program Manager from DOC's National Oceanic and Atmospheric Administration believed that there was a need for a formal program, such as indicated by the strategy, to systematically look for potential hazardous waste sites.

DEPARTMENT OF ENERGY

DOE headquarters officials, such as the Director, Office of Operational Safety, believed that the strategy document was all inclusive. They preferred, however, to negotiate a memorandum of understanding with EPA to govern CERCLA activity at DOE facilities. The officials informed us in June 1984 that one meeting had previously been held with EPA to discuss the possibility of a memorandum of understanding.

DOE field office officials viewed the strategy as having both good and bad points. For example, on the positive side, officials from DOE's Chicago Operations Office believed that the strategy identified the intent of CERCLA, established better control over the reporting of facilities, and provided detailed guidance on how to interpret environmental issues. Negative points included definitional problems, such as what is meant by agency monitoring and what is defined as a CERCLA site. The Director of Environmental Activities at DOE's Savannah River Office also favored two concepts presented in the strategy: (1) establishing a memorandum of understanding specifying the roles, responsibilities, activities, and time frames for both EPA and DOE and (2) training federal agency staff. Officials from DOE's Rocky Flats Plant believed that negotiating a CERCLA memorandum of understanding was a positive aspect of the strategy. DOE officials in EPA Regions IX and X also stated that the strategy was needed, but one believed that DOE was already initiating actions called for in the strategy.

DEPARTMENT OF THE INTERIOR

DOI headquarters officials, including the Director, Office of Environmental Project Review, believed that the strategy was needed if EPA believed that federal agencies had not complied with CERCLA. He stated that the federal agencies should conduct any needed CERCLA activities with EPA monitoring the agencies' work performance. He added that DOI would prefer to have these arrangements spelled out in a memorandum of understanding rather than a strategy document.

DOI regional/field office officials offered a wide variety of comments on the strategy. For example, in EPA Region II, DOI officials believed that the strategy was good but raised a number of concerns. For example, DOI lacks technical expertise to identify sites and agency staff needs training. In EPA Region VI, DOI officials viewed the strategy as providing a mechanism to create an awareness among federal agencies of the need to comply with

CERCLA requirements. However, a Bureau of Land Management official stated that EPA could have problems enforcing the strategy, particularly if funds and other resources were not allocated to the federal agencies for strategy implementation. In EPA Region IV, National Park Service officials did not believe that there was a need for training by EPA or for an interagency agreement governing CERCLA actions. These officials did believe, however, that EPA should determine whether National Park Service officials were aware of all requirements and had complied properly. Fish and Wildlife Service officials in EPA Region IV also commented that in order for the strategy to be successful, EPA should provide guidance and advice. DOI officials in 10 of 16 offices contacted in EPA Regions IX and X stated that the strategy was needed but cited the lack of resources as an implementation problem.

DEPARTMENT OF JUSTICE

According to officials from the Office of Safety and Environmental Health Programs within DOJ's Bureau of Prisons, the strategy will not work if resources are not committed to it. Although these officials support the concept of identifying potential hazardous waste sites, they stated that the lack of resources and technical expertise precluded them from performing such actions. In terms of existing priorities, these officials stated that identification of past hazardous waste sites would be their lowest priority.

DEPARTMENT OF TRANSPORTATION

Generally, DOT officials believed that the draft strategy was needed. An official from the DOT Office of the Secretary informed us that he liked the strategy and indicated that most of DOT's administrations needed guidance in this area. He also stated that this strategy was a step in the right direction and should have been initiated before now. The Chief of the U.S. Coast Guard's Environmental Compliance and Review Branch stated that the strategy would be helpful in convincing upper management of the importance of the environmental area. Federal Highway Administration officials were in favor of a strategy or any guidance that can be obtained from EPA. An official from the U.S. Coast Guard's office in Cleveland, Ohio, also believed that there would be problems in implementing the strategy due to lack of trained personnel, travel ceiling limitations, and insufficient time to visit all sites. A U.S. Coast Guard official in EPA Region IX stated that the strategy was not needed because, in his opinion, it was no different from the activities currently underway.

In its comments, dated September 10, 1984, on a draft of this report, DOT stated that as a result of its recent efforts indicating it has no CERCLA activity, other than the U.S. Coast Guard, it agreed with the statement made by GSA in the next section that a comprehensive CERCLA program could become an expensive effort with limited results.

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GENERAL SERVICES ADMINISTRATION

Officials from GSA's Environmental Affairs Staff believed that the strategy indicated EPA's renewed emphasis on federal facilities' problems. These officials also believed that through the strategy, EPA could provide much needed assistance to the agencies by issuing guidance, providing program direction, and acting as a resource for agencies lacking environmental expertise. These officials cautioned, however, that each federal agency should not be required to establish a comprehensive CERCLA program. They believed that such a program for some agencies could become an expensive effort with limited results.

A GSA regional office official in EPA Region II believed that the strategy was a good concept because the government should clean up any problems it has. He added that federal agencies, however, may lack technical expertise to carry it out. The Chief, Accident and Fire Prevention Branch, in GSA Region IV also believed that the strategy was needed.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

HHS officials from the Office of Safety and Health and the Public Health Service's Director of Safety believed that there was a need for such a strategy. The one major problem they cited was adequacy of resources to implement the strategy.

At the field office level, officials from the Public Health Service's National Institutes of Health had mixed reactions on the strategy. For example, officials from the National Institute of Environmental Health Sciences did not believe that the strategy was appropriate for them since fairly extensive searches for potential sites have concluded that none exist. These officials added, however, that the strategy was a viable concept to promote CERCLA compliance but were concerned about the paperwork burden it could create.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

HUD officials from the Office of Environment and Energy informed us that the strategy had no real impact since HUD, in their opinion, did not have any hazardous waste sites.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA officials from the Facilities Engineering Division believed that the strategy was a good idea because it would demonstrate EPA's expectation that federal agencies would perform various CERCLA activities. This strategy will enable the officials to convince NASA management to budget funds to develop CERCLA policies and procedures.

NASA field office officials had mixed reactions to the strategy. For example, officials from the Kennedy Space Center

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and the Mississippi Army Ammo Plant did not believe the strategy was needed since NASA, in their opinion, was doing a good job at identifying and assessing its hazardous waste sites. However, the Chief, Civil Structural and Estimating Branch, Marshall Space Flight Center, believed that there should be a memorandum of understanding between EPA and NASA establishing guidelines on how to identify and assess hazardous waste sites.

U.S. POSTAL SERVICE

USPS officials had no comments about the strategy since, in their opinion, the Postal Service did not have any hazardous waste sites.

DEPARTMENT OF THE TREASURY

Treasury officials, including the Environmental Coordinator within the Physical Security Division, stated that because they had never looked to determine whether the Department had potential sites, there probably was a need for the strategy.

TENNESSEE VALLEY AUTHORITY

TVA officials did not believe that the strategy would be beneficial for them because, in their opinion, TVA has not had CERCLA compliance problems. These officials also did not believe that a memorandum of understanding with EPA delineating CERCLA roles, responsibilities, time frames, or actions was necessary nor would it be helpful for EPA to confirm agency efforts when few or no sites were reported under CERCLA Section 103(c).

U.S. DEPARTMENT OF AGRICULTURE

Officials from USDA, including the Deputy Chief, Real Property Division, believed that the strategy would be helpful in fostering better coordination between EPA and the other federal agencies and requiring EPA to take a stronger advisory role in providing guidance to the federal agencies. These officials cautioned, however, that without additional funds to pursue the strategy's initiatives, it could cause adverse impacts on USDA's efforts.

A USDA Forest Service official in EPA Region VII believed that the strategy would improve federal facilities' compliance because it established EPA requirements. He also believed that EPA could experience problems enforcing the strategy if funds were not allocated to agency regional offices to accomplish the strategy's objectives.

VETERANS ADMINISTRATION

VA's Director, Office of Engineering Services, did not know whether the strategy was needed or not. He believed that good coordination and communicaton at the regional office levels would

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probably be sufficient to ensure that federal agencies identify any potential hazardous waste sites. Officials from the VA's Danville, Illinois, Medical Center believed that the strategy had no effect on current hospital operations but did recognize that it offered potential benefits.

OVERALL INFORMATION ON 340 FEDERAL AGENCY

HAZARDOUS WASTE SITE LOCATIONS

The extent of 11 federal agencies' efforts to assess, evaluate, or clean up hazardous waste sites at 340 locations on their lands or under their control was discussed in chapter 3. This appendix provides additional information on the types of hazardous wastes present or suspected at the locations, EPA regional office officials' opinions on whether the locations should be in ERRIS, and federal agency officials' estimates of problems posed by the locations.

			zardous				
Suspected	at	340	Hazardo	ous Wa	aste	Site	Locations

Type of waste	Number of <u>locations</u> a
Organics	46
Inorganics	37
Solvents	52
Pesticides	57
Heavy metals	53
Acids	42
Bases	18
Polychorinated biphenyls	45
Mixed municipal wastes	22
Unknown	63
Other	214 ^b

^aColumn cannot be totaled because many locations had more than one type of hazardous waste present or suspected.

^bOther waste categories included asbestos, mining operations, and unexploded ordnance.

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EPA Regional Office Officials'	
on Whether the 340 Hazardous	
Site Locations Should Be in E	RRIS ^a
EPA regional office officials' opinions	Number of locations
Definitely yes Probably yes Uncertain Probably not Definitely not	111 96 93 30 10
Total	340
^a Of the 340 locations, 220 were in data system.	the ERRIS

Federal	Agency	Officia	ls' Esti	Imates	of
Problems					
Environment	by Ha:	zardous	Waste S:	te Lo	cations

	Number										
	of loca-	Serious	Moderate	Minor	NO	No basis					
Agency	tions	problem	problem	problem	problem	to judge					
COE	4	-	-	-	4	-					
DOE	37ª	-	5	10	21	1					
DOI	248	13	23	49	83	80					
DOJ	1	-	-	1	-	-					
DOT	17	2	2	1	10	2					
GSA	9	-	1	-	6	2					
HHS	4	-	-	-	4	-					
NASA	7	-	-	1	5	1					
TVA	1	-	-		-	1					
USDA	6p	-	-	1	4	1					
VA	4			_	_3	_1					
Total	338	15	31	63	140	89					

^aFor one location there were 43 sites (8 moderate problem, 1 minor problem, 1 no problem, and 33 no basis to judge). ^bFor one location we could not locate a knowledgeable agency official.

SUMMARY INFORMATION ON EACH OF THE 340 HAZARDOUS WASTE SITE LOCATIONS

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	Location name	City and/or state	Agency	No. of sites	Type of location ^a	Status of actions ^b	Was location in ERRIS? ^C	Should location be in ERRIS? ^d	Problems posed by location ⁰
١.	Ninigret NWR	Charlestown, Rl	DOI	2	С	FAR	Y	DY	NB
2.	Seal Island NWR	Rockland, ME	DO 1	I	С	NAT	N	DN	NB
3.	Sachuset Point NWR	Middletown, Rl	D01	1	A	NAT	N	U	NB
4.	Truston Pond NWR	S. Kingstown, RI	DOT	1	A	FAR	N	ບ	MI
5.	Charlestown Navy Yard	Charlestown, MA	DOI	1	С	AC	Y	DN	MO
6.	Portsmouth Abandoned Mine	Portsmouth, RI	D01	1	в	NAT	Y	DY	MO
7.	VA Supply Depot	Somerville, NJ	¥ A	3	A	FAR	¥	U	NP
8.	GSA Rarltan Depot	Edison, NJ	GSA	1	в	AC	Y	DY	MO
9.	VA Supply Depot	Hillsborough Twp, N	IJ GSA	1	A	AC	Y	PN	NP
10.	USCG Sandy Hook Station	Highlands, NJ	DOT	2	С	FAR	Y	DY	NP
11.	GSA Depot-Belle Mead #1	Belle Mead, NJ	GSA	2	A	AC	Ŷ	U	NP
12.	FAA Technical Center	Atlantic City, NJ	DOT	4	A	AC	Y	PN	SE
13.	USDA Plum island #1	Orlent Point, NY	USDA	3	A	FAR	Y	U	NP
14.	VA Hospital	Castle Point, NY	¥A.	1	, A	FAR	Y	U	NB
15.	Lake Ontarlo Ord: Works	Model City, NY	DOE	1	٨	FAR	Y	ÐY	NP
16.	Rolling Knolls Landfill	Chatham, NJ	001	1	A	NAT	Y	U	NB
17.	Great Swamp NWR	Basking Ridge, NJ	DOI	2	В	NAT	Ŷ	DY	MO
18.	iroquois NWR	Alabama, NY	DOI	1	A	NAT	Y	DY	ML
19.	Culobra Islands NWR	Boqueron, PR	DOI	1	С	NAT	N	DY	NB
20.	Desecheo island	Boqueron, PR	DOT	1	С	NAT	N	DY	NB
21.	Barnegate NWR	Barnegate, NJ	DO I	1	A	NAT	N	DY	NB
22.	Edison Nat. Historic Site	West Orange, NJ	DO1	1	٨	FAR	Y	U	NP
23.	Fountain Ave. Landfill	Brooklyn, NY	DOT	ŧ	8	FAR	Y	DY	NB
24.	Penn. Ave. Landfill	Brooklyn, NY	001	1	в	FAR	۲	ΟY	NB
25.	Floyd Bennett Fleid	Brooklyn, NY	DOT	2	С	NAT	N	DY	NB
26.	Fort Hancock	Sandy Hook, NJ	DO1	2	С	NAT	N	DY	NB
27.	Fort Tilden	Breezy Point, NY	DO1	2	С	NAT	N	DY	NB
28.	Miller Fleid	Staten Island, NY	DOT	1	С	NAT	N	OY	· NB
29.	UNC	Pauling, NY	DO1	1	8	FAR	¥	DY	NB
30+	CG Air Station Brooklyn	Brooklyn, NY	DOT	2	С	FAR	N	ΡQ	MO
31.	Fire Island	Suffolk County, NY	DO1	1	в	NAT	N	DY	NB
32.	DOE Sampling Plant	Middlesex, NJ	DOE	. 1	A	FAR	Y	DY	NP
33.	New Brunswick Lab	New Brunswick, NJ	DOE	1	A	FAR	Y	PY	NP
34.	Energy/Env. Research Ctr.	, PR	DOE	1	A	NAT	N	ÐY	NP
35.	Montezuma NWR	Seneca Falts, NY	001	. 1	A	NAT	N	DY	ML

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		Oldu and/on state	Aconcy	No. of sites	Type of location ^a	Status of actions ^b	Was location In ERRIS? ^C	Should location be in ERRIS2d	Problems posed by location ^e
	Location name	City and/or state	Agency	51105	10001101	actions	ENILIST	ENTIST	TOCAT TOTAL
36.	Brookhaven Labs	, NY	DOE	6	A	FAR	Y	DY	NP
37.	Valley Forge Nat. Park	Valley Forge, PA	DOT	1	в	AC	Y	DY	NP
38.	CG Station Erle	Erie, PA	DOT	۱f	A	NAT	N	PN	MI
39.	Bettis Atomic Power Lab	West Mifflin, PA	DOE	F	Α	FAR	N	DY	NP
40.	Tinicum Nat. Envir. Ctr.	Darby, PA	D01	1	в	FAR	Y	DY	NB
41-	Erle NWR	Guys Mill, PA	DOT	2	A	NAT	N	DY	NB
42.	Fisherman Island NWR	Northampton Cty, VA	D01	1	С	FAR	Y	PΥ	MO
43.	Plum Tree island NWR	Pequosan, VA	DO1	11	С	NAT	N	ບ	SE
44.	USCG Support Center	Portsmouth, VA	DOT	1	A	AC	N	U	NP
45.	Langley Research Center	Hampton, VA	NASA	1	A	FAR	N	PΥ	NP
46.	Fort Lincoln Barrel Site	Washington, DC	GSA	3	8	AC	Y	DY	NB
47.	Nat. Institutes of Health	Bethesda, MD	HHS	1	۸	AC	Y	DY	NP
48.	FPRS/Curtis Bay Depot	Baltimore, MD	GSA	1	A	AC	N	DY	NP
49.	GSA Bulk Storage Facility	Bladensburg, MD	GSA	1	A	AC	Y	ÐY	NP
50.	Gerontology Research Ctr.	Baltimore, MD	HHS	1	A	AC	N	PN	NP
51.	Frederick Cancer Res. Ctr.	Frederick, MD	HHS	1	8	AC	Y	ĐΥ	NP
52.	CG Alds to Naviga. Team	Crisfield, MD	DOT	1	A	NAT	N	DY	NP
53.	Aberdeen Proving Grounds	Aberdeen, MD	DOT	2	A	AC	Y	DY	NP
54.	Elk River/Back Creek	Chesapeake Cty, MD	DOT	1	A	AC	Y	DY	NP
55.	Beltsville Agr. Res. Ctr.	Bettsville, MD	USDA	2	A	FAR	Y	PY	NP
56.	Beltsville Agr. Res. Ctr.	Beltsville, MD	USDA	1	A	NAT	N	DY	NB
57.	Marshall Space Fit. Ctr.	Huntsville, AL	NASA	1	A	AC	Y	DY	NP
58.	Nat. Fertilizer Dev. Ctr.	Muscle Shoals, AL	TVA	1	C	NAT	Y	DY	NB
59.	CG Air Station Miaml	Opa-locka, FL	00T	1	С	FAR	Y	DY	NP
60.	Richmond Naval Air Sta.	Perrine, FL	GSA	12	۸	FAR	Y	DY	NP
61.	Army Ammo Plant	Bay St. Louis, MS	NASA	4	C	NAT	Ŷ	DY	NP
62.	Savannah River Plant	Aiken, SC	OOE	43	٨	FAR	Y	DY	9
63.	Oak Ridge Nat, Lab.	Oak Ridge, TN	DOE	28	A	FAR	Ŷ	DY	MO
64.	Animal Research Lab.	Oak Ridge, TN	DOE	1	٨	AC	Y	DY	NP
65.	Y-12 Piant	Oak Ridge, TN	DOE	1 f	A	FAR	Y	DY	MO
66.	Primate Center	Perrine, FL	HHS	11	С	FAR	N	DY	NP
67.	Harris Neck NWR	Savannah, GA	DOI	1	С	AC	N	PΥ	NP
68.	Bear Bluff Substation	Orangeburg, SC	DOI	1 t	Α	FAR	N	U	NB
69.	Sandhill Orane NWR	Gautler, MS	DOT	· 1	в	FAR	N	U	NB
70.	Denver Res. Center	Galnesville, FL	D01	1	A	FAR	N	ΡY	NB

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	Location name	City and/or state	Agency	No. of sites	Type of location ^a	Status of actions ^b	Was location In ERRIS? ^C	Should location be in ERRIS? ^d	Problems posed by location ^e
71.	Piedmont NWR	Round Oak, GA	DOT	1	A	AC	N	DN	NP
72.	Loxahatchee NWR	Boynton Beach, FL	D01	ì	Α	AC	N	DN	NP
73.	Reelfoot NWR	Union City, TN	DOT	1	A	AC	N	DN	NP
74.	Kennedy Space Center	Kennedy Sp. Ctr., Fl	NASA	8	A	FAR	N	ΡΥ	NB
75.	USCG Support Center	Ellzabeth City, NC	DOT	1f	С	NAT	N	ΡY	NB
76.	Horn Island	Gulf Island, MS	DOT	4	С	FAR	N	PN	NB
77.	Gaseous Dif. Plant	Paducah, KY	DOE	3	A	FAR	N	DY	MI
78.	Gaseous Dif. Plant	Oak Ridge, TN	DOE	4	A	FAR	N	ΡY	мі
79.	Chick-Chatt	Ft. Oglethorpe, GA	DOT	1 f	С	NAT	N	ΡY	NB
80.	Fort Sumter	Charleston, SC	DO I	1 ^f	С	NAT	N ·	PN	NB
81.	Nike Hercules Mis. Site	Long Pine Key, FL	001	1 [†]	С	NAT	N	PN	NB
82.	Cape Hatteras Nav. Bldgs.	Buxton, NC	DO 1	1 ^f	С	NAT	N	DN	NB
83.	Fort Pickens	Fort Pickens, FL	001	1 f	С	NAT	N	DN	NB
84.	Angonne Lab	Argonne, IL	DOE	4	A	AC	Y	DY	NP
85.	Mound Facilities	Miamisburg, OH	DOE	1	A	NAT	Y	DY	NB
86•	Portsmouth Gas. Dlf. Plt.	Picketon, OH	DOE	2	Α	FAR	Y	ÐY	ML
87.	Feed Production Center	Fernald, OH	DOE	10	Α	FAR	Y	ÐY	MI
88.	Crab Orchard NWR	Marion, IL	DOI	ı f	С	FAR	Y	DY	SE
89.	Red Lake IR	Red Lake, MN	DOI	1	С	NAT	N	PN	NP
90.	Tamarac NWR	Rochert, MN	DOT	1 f	A	FAR	N	PN	MI
91.	Fountain City Sr. Base	Fountain City, Wi	COE	1	Α	AC	Y	DY	NP
92.	Medical Ctr. Hospital	Danville, IL	VA	4	Α	NAT	N	ÐY	NP
93.	Lewis Res. Center	Sandusky, OH	NASA	2	С	FAR	N	DY	NP
94.	USCG Air Station	Traverse City, Mi	DOT	1	۸	FAR	N	DY	SE
95	USCG Light White Shoal	St. of Mackinac, Mi	DOT	1	A	NAT	N	DY	MO
96.	USCG Light La Pointe	Ashland, WI	DOT	1	A	FAR	N	DY	NB
97.	Scientific Lab.	Los Alamos, NM	DOE	۱f	٨	FAR	Y	PY	NP
98.	Sandia Nat. Lab.	Albuquerque, NM	DOE	۱f	A	NAT	Y	PY	NP
99.	SPR Bryan Mound Site	Freeport, TX	DOE	4	A	FAR	Y	DY	NP
100.	Lacassine NWR	Łake Arthur, LA	DOT	1	A	AC	Y	PN	NP
101.	White Sands Test Fac.	Las Cruces, NM	NASA	1 f	A	AC	Y	DY	NP
102.	Millwood Reservoir	Ashdown, AR	COE	1	A	AC	Y	DN	NP
103.	Martin Marletta Aero.	New Orleans, LA	NASA	9	۸	FAR	Y	DY	MI
104.	Pantex Plant	Amarillo, TX	DOE	1 [†]	A	NAT	Y	PN	NP
105.	Aransas Wildlife Ref.	Austwell, TX	DOI	1†	۸	NAT	N	U	NP

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	Location name	City and/or state	Agency	No. of sites	Type of location ^a	Status of actions ^b	Was location in ERRIS? ^C	Should location be in ERRIS2 ^d	Problems posed by location ^e
		City and/or state	Agoney	51105	Tocarron	<u>ac110115</u>	<u></u>	LIUCISI	TOCATION
106.	Tar Creek	Miami, OK	DOL	1	В	FAR	Y	PY	МІ
107.	Lake Lavon-North Gully	Princeton, TX	COE	1	Α	AC	Y	ΡY	NP
108-	Lake Lavon-St. Paul	St. Paul, TX	COE	1	А	AC	Ŷ	PY	NP
109.	Padre Is: Nat: Seashore	Corpus Christi, TX	DOT	ł.	Α	AC	Y	DN	MO
110.	Jack Pile Mine	Laguna IR, NM	001	1	В	FAR	N	บ	NB
111-	Nebraska Nat. Forest	Halsey, NE	USDA	ł	Α	FAR	Y	PN	NP
112.	Federal Building	Kansas City, MO	GSA	1	A	FAR	N	₽Y	NB
113.	Rolla Research Ctr.	Rolla, MO	DO 1	I.	A	NAT	N	PN	NP
114.	Ames Laboratory	Ames, 1A	DOE	9	A	NAT	N	U	NP
115.	Bendix	Kansas City, MO	DOE	1 ^f	A	FAR	N	PΥ	NP
116+	Central Direct Fed. Div.	Denver, CO	DOT	1	A	FAR	Y	U	NP
117.	Metab./Radiat. Res. Lab.	Fargo, ND	USDA	1	A	NAT	Y	DY	NP
118.	Denver Federal Center	Denver, CO	GSA	1	A	AC	N	PN	NP
119.	Solar Energy Res. Inst.	Golden, CO	DOE	1 f	A	NAT	Y	PN	NP
120.	Rocky Flats	Golden, CO	DOE	1	Α	FAR	Y	DY	MI
121.	Laramle Ener. Tech. CtrN.	Laramie, WY	DOE	١	A	FAR	Y	P۲	NP
122.	Laramle Ener. Tech. Ctr.	Laramle, WY	DOE	1	A	AC	Y	PY	NP
123.	Anvii, Points	Rifle, CO	DOE	1	٨	FAR	Y	PY	MI
124.	Grand Junction	Grand Junction, CO	DOE	1	А	FAR	N ·	U	MD
125.	Hot Springs Hospital	Hot Springs, SD	٧A	t	٨	FAR	Y	U	NP
126.	Husky Oll Refinery	Cody, WY	D01	2	8	NAT	Y	DY	MI
127.	Riverton Project	Riverton, WY	DO 1	1	8	NAT	N	DY	MI
128.	C.M. Russel NWR	Lewlstown, MT	DOI	1	٨	NAT	N	U	МІ
129+	Waubay NWR	, SD	DO 1	1	٨	NAT	N	U	MI
130.	Nat. Bison Range	Molese, MT	DO1	1	A	NAT	N	PN	MI
131.	Juhl WPA	Devils Lake, ND	DOI	1	٨	NAT	N	U	NB
132.	Texaco-Calpet O&G Fields	Beacon, WY	D01	1	В	NAT	۲	ÐY	MI
133+	Cottonwood Canyon	Blanding, UT	D01	3	в	FAR	Y	PY	MI
134.	Monticello	Monticello, UT	DOT	1	в	FAR	Y	PΥ	NP
135.	Desert Mound Mine	Cedar, UT	DO1	1	в	NAT	Y	U	NP
136.	Orchard Mesa Landfill	Grand Junction, CO	DO1	1	A	FAR	Y	PN	NP
137.	Philipsburgh Mining Area	Philipsburgh, MT	DOł	1	В	AC	Y	DY	NB
138.	Frye Canyon Tallings	Hite, UT	DOI	1	В	FAR	Y	PΥ	ML
139.	Dugway Proving Grounds	Dugway, UT	DOT	. 1	С	AC	Y	ÐY	MI
140.	O'Fallen Radar Station	, мт	DO I	3	С	NAT	N	U	NB

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					f		Was	Should	
				No.		Status	location	location	Problems
				of	Type of	of	in	be in	posed by
	Location name	City and/or state	Agency		location ^a	actions ^b	ERRIS?C	ERRIS?d	location ⁹
141-	Abandoned Gravel Pit	, UT	DO1	1	С	NAT	N	U	ML
142.	Split Rock Uranium Mill	Jeffrey, WY	DOI	1	A	NAT	Y	U	NB
143.	Split Rock-Mill Town	Jeffrey, WY	DO1	1	٨	FAR	Ŷ	PY	NB
144.	Truk Lagoon	Truk (TTPI), TT	DO1	60	С	FAR	Y	PΥ	NP
145.	Stored PCB Transformer	Salpan Harbor, CM	DOI	1	A	FAR	Y	DY	NP
146-	Calcium Hypo+ Storage	Salpan, CM	DOI	1	A	AC	Ŷ	PΥ	NP
147.	PCB Warehouse	Salpan, CM	D01	1	A	AC	Y	DY	NP
148.	PCB-Palau, Yap, Truk, etal	Micronesia, TT	DOI	22	A	FAR	Y	PY	NP
149.	Dead Cattle on Tinlan	Marlanas Is., CM	DOT	1	Α	AC	Y	DY	NP
150.	Celtor Chemicat	Hoopa IR, CA	001	1	В	FAR	Y	DY	SE
151.	Chromite Float Deposit	Hoopa IR, CA	DOT	1	в	FAR	Y	PN	Mi
152.	Copper Bluff Mine	Hoopa IR, CA	DOI	I	B	FAR	Y	PY	SE
153.	Football Field Dumpsite	Hoopa IR, CA	D01	1	В	FAR	Y	PN	MI
154.	G. A. Way Lumber Co.	Hoopa Valley IR, CA	DOI	1	в	AC	Y	PN	MI
155.	Hailstone Allotment	Hoopa IR, CA	D01	1	в	FAR	Y	PN	MO
156.	Hoopa Shopping Center	Hoopa IR, CA	Đ01	1	8	FAR	Y	PN	MO
157.	Masonite-Mescat Fleid	Hoopa IR, CA	DO1	1	в	FAR	Y	PY	SE
158.	Masonite Mill Creek	Hoopa IR, CA	DOT	1	В	FAR	Y	PY	SE
159.	Risting Lumber Mill	Hoopa IR, CA	D01	1	в	AC	Y	PN	MI
160+	Running Silver Mine	Hoopa IR, CA	DOT	5	B	FAR	Y	PN	MO
161.	Supply Creek Landfill	Hoopa IR, CA	DOI	1	в	FAR	Y	PN	MI
162.	PG&E Transformer Subst.	Hoopa Valley IR, CA	DO 1	1	в	FAR	Y	DN	MI
163.	RHD Veneer	Hoopa Valtey IR, CA	D01	1	B	AC	Y	PN	MI
164.	Old Airport Mill	Hoopa Valley IR, CA	DO1	1	В	AC	Ŷ	PN	ML
165.	CA Pacific Lumber Mill	Hoopa Vailey IR, CA	DOT	1	в	FAR	Y	PY	MO
166+	Big Four Mili	Hoopa Valley IR, CA	DOI	1	В	FAR	Y	PN	ML
167.	CG Loran C Station	Middletown, CA	DOT	1	A	AC	Y	DY	NP
168.	Volcanoes NP	, Hł	001	1	С	FAR	N	PY	MI
169.	American Memorial	Saipan, CM	DO1	1 f	С	FAR	N	РΥ	MI
170.	Redwood NP	, CA	DOT	1	С	FAR	N	PY	MO
171.	Ft. Irwin-Road Site	N. of Barstow, CA	DOI	1	С	NAT	Y	U	MI
172.	Vallecitos Oli Field	San Benito Co., CA	DOI	10	в	FAR	Y	ΡY	NB
173-	Ameroll/BLM Rt. of Way	, CA	DOI	1f	В	FAR	Y	U	ML
174.	Union Carbide-Joe Mine	, CA	DOT	. 1 ^f	8	NAT	Y	DY	NB
175.	Atlas Asbestos Co.	Coalinga, CA	DO1	1	в	FAR	Ŷ	P۲	NB

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				No.		Status	location	location	Problems
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	Location name	City and/or state	Agency	sites	location ^a	<u>actions</u> b	ERRIS?C	ERRISid	location [®]
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176.	Honey Lake	, CA	DOI	1	C	NAT	N	PY	MI
177.	Chocolate Mtn.	, CA	DOI	1 ^f	C	NAT	N	PY	ML
178.	Cuddyback Gunnery Range	Ridgecrest, CA	DOI	1† . f	C	NAT	N	PY	MI
179.	East Mesa	(Near) Brawley, CA	DOI	1 ^f	C	NAT	N	PY	MI
180.	Rice Valley Sand Dunes	, CA	DO	1	С	NAT	N	PY	ML
181.	Owls Head Mins.	, CA	DOI	1	С	NAT	N	PY	NP
182.	Johnson Valley	, CA	DOI	1	С	NAT	N	ΡΥ	NP
183.	Twentynine Palms MB	, CA	001	1	C	NAT	N	PΥ	MI
184.	Callf. Desert Area	San Bernadino, CA	DOI	1	C	NAT	N	PY	MI
185.	Iron Mtn. & Kilbech Hills	, CA	DOI	1	С	NAT	N	PY	MI
186.	Shell Oll CoGore B/Kern	, CA	DO1	2	8	FAR	Y	ບ	NB
187.	Molycorp inc.	, CA	DO 1	2	B	FAR	Y	DY	NP
188.	Diesel Oli in Well	Barstow, CA	DOI	1	8	FAR	N	PΥ	NP
189.	Morek Creek Mill Site	Hoopa IR, CA	DO 1	1	в	FAR	N	PN	MI
190.	Upper Pecwan Mill	Hoopa IR, CA	DO I	1	8	FAR	N	PN	MI
191.	Kofa NWR	Yuma, AZ	DOT	2	С	FAR	N	ΡY	MO
192.	Cabeza Prieta NWR	Ajo, AZ	DOI	1	С	FAR	N	PY	MO
193.	Imperial NWR	, AZ	001	1 f	8	FAR	N	1	NB
194.	Faralton Island NWR	Farallon, CA	DOI	1 f	С	FAR	N	PY	NP
195.	San Francisco Bay NWR	San Francisco, CA	001	1 f	В	NAT	N	U	NB
196.	Hawallan Islands NWR	, HÍ	D01	1 f	С	FAR	N	PY	MO
197.	Baker NWR	, TT	DO1	1	с	FAR	N	DY	MI
198.	Howland NWR	, m	001	1	С	FAR	N	ÐY	MI
199.	Kesterson Reservolr	Los Banos, CA	DOT	1	٨	FAR	N	DY	MO
200.	Lawrence Livermore N. Lab.	Elvermore, CA	DOE	5	A	FAR	Y	DY	MI
201 •	L. Livermore N. LabS.300	Tracy, CA	DOE	12	A	FAR	Y	DY	NP
202.	Stanford Linear Accel. Ctr.		DOE	1	A	FAR	Y	DY	MÜ
203.	Nevada Test Site	Mercury, NV	DOE	jf.	A	FAR	Ŷ	PY	NP
204.	Federal Correction Inst.	Lompac, CA	ÐOJ	11	Λ.	FAR	Y	DY	МІ
205.	War on the Pacific	, GUAM	DO1	jf.	c	FAR	N	PΥ	MI
206.	San Carlos Irr. Proj.	Coolidge, AZ	001	2	Ā	FAR	Ŷ	DY	MI
207.	Colo: River Irr. Proj.	Parker, AZ	DOI	1	Ā	FAR	N	PY	MI
208.	Boulder City Eng. Lab.	Boulder City, NV	DOI	3	Ā	FAR	N	U	NP
200.	Douglas Co., Sanit. Lfi.	Douglas Co+, NV	DOI	1	B	AC	Y	DY	NP
210.		Reno, NV	DOI	1	8	NAT	Y	ย	NP
210.	West Coast O/G Gooseberry		001	•	U		,	0	

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	Location name	Clty and/or state	Agency	sites	location ^a	<u>actions</u> ^D	ERRIS?C	ERR IS?d	locat lon ^e
211+	Ormsby Sanitary Landfill	Carson City, NV	DOI	1	в	AC	Y	DY	NP
212.	Veta Grande Mining Co.	Gardnerville, NV	DOI	3	8	NAT	Y	U	NP
213.	Nerco Minerals Co.	Mineral Co., NV	001	1	B	NAT	Y	U	NP
214.	Ely Crude Oll Co.	Grant/Horse Mt., NV	DOT	3	В	FAR	Y	DY	NP
215.	Intermountain Exploration	, NV	001	1	В	NAT	Y	DY	NB
216.	Union Pac. RR Rt. of Way	Leith, NV	DOI	1	В	AC	Y	DY	NB
217.	Crescent Mining Ltd.	Clark Co., NV	DOI	1	В	NAT	Y	DY	NB
218.	Am. Borate	Amarogosa Valley, NV	DOI	1	В	NAT	Y	U	NP
219.	Rancher's Expl/Dev. Corp.	Blue Bird Mine, AZ	DOI	1	в	FAR	Y	U	NP
220.	Kennecott Minerals Co.	Ray, AZ	DOT	4	В	AC	Y	U	NP
221.	Southwest. Az. Desert Area	, AZ	DOI	1	С	NAT	N	PΥ	ML
222.	Duval Corp/Slerrita/Esp. M.		DOT	6	В	FAR	Y	U	NP
223.	Imco Serv., Mt. Springsmill	, NV	DOT	1	В	AC	Y	U	NP
224.	Mt. Hope Mine	Ely/W. Pine Co., NV	DOT	1	в	NAT	Y	U	NB
225.	Kemco Buster Mine	Goldfield, NV	DO I	1	8	NAT	Y	ູ່ປ	NB
226.	Cortez Joint Venture	Eureka/Landers, NV	DOI	1	в	AC	Y	DY	NP
227.	Smokey Valley Mining Co.	Round Mt., NV	DOI	4	B	AC	Y	DY	NP
228.	Imco Serve, Ne Clipper Mill	•	DOI	1	B	AC	Y	U	NP
229.	Gold Creek Corp.	Eureka, NV	DOI	1	в	NAT	Y	Ű	NB
230.	Duval Corp. Mine/Cop. Cany.	•	DOI	1	8	AC	Ŷ	DY	NP
231.	All Min+, Barite Mine/Mill	, NV	DOI	1	- B	AC	Ŷ	U	NP
232.	Crescent Valley Mill	Eureka Co., NV	DOL	i	8	AC	Ŷ	DY	NP
233.	Antelope Val. Pest. Cont.	Lander Co., NV	DOI	1	B	AC	Ý	DY	NP
234.	Dresser Min. Greystone	Battle Mt., NV	DOI	2	B	AC	Ŷ	U	NP
235.	Aaron Mining	Crescent Valley, NV	DOI	8	8	FAR	r Y	DY	NB
236.	Lake Havasu San. Dist.	L. Havasu Co., AZ	DOI	ĭ	В	FAR	Ŷ	DY	NP
237.	Hillside Site, Bur. Cr. Bn.	, AZ	DOI	1	8	FAR	N.	Ű	SE
238.	Congress Cons. G. Mine	Phoenix, AZ	DO1	3	B	FAR	Y	Ŭ	NP
239.	Inspiration Cons. Copp-Ox	Inspiration, AZ	DOI	2	8	FAR	Ŷ	Ŭ	NP
240.	Inspir. Cons. Copp-Christ.	Inspiration, AZ	DO1	10	8	FAR	Ŷ	Ű	NB
240.	Inspiration Cons. Copper	inspiration, AZ	DO1	7	B	FAR	Ŷ	Ŭ	NP
241.	Somerton Landfill	Somerton, AZ	001	í	B	FAR	Ŷ	DY	NB
242.	Asarco, Inc., SII. Bell	Silver Bell, AZ	DOI	8	B	FAR	Ŷ	U	SE
24.5+	Zonla Copper Mine	Kirkland, AZ	DOI	. if	B	AC	Ŷ	Ű	NP
245.	Western Windfall Ltd.	Eureka, NV	DOI	1	8	FAR	Ŷ	DY	MO
2424	NOSIDI HINUIAII LIU+	LUI ONG, ITT	001	I		1787	•		.~

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	Location name	City and/or state	Agency	sites	locationa	actionsD	ERRIS?C	ERRIS?d	location ⁰
246.	Bunker Hill Co.	Ploche, NV	DOI	2	8	FAR	Y	U	NB
247.	Union Carbide, Emerson	Templute, NV	DOI	1	в	AC	Ŷ	U	NB
248.	Universal Gas (MT) Inc.	, NV	DO1	1	B	NAT	N	DY	NB
249.	Dee Gold Co.	, NV	DO1	1	в	NAT	N	ÐY	NP
250.	Pancana Ind. Inc.	Elko Co., NV	001	1	в	NAT	Y	u	NP
251+	Cominco America, Inc.	Etko Co., NV	D01	1	B	NAT	Y	DY	NP
252.	Elsenman Chem. Co.	Carlin, NV	DO1	1	в	NAT	Y	U	NP
253.	Montello Sheelite	Elko Co., NV	DO I	1	в	NAT	Y	U	NP
254.	Chromalloy Mining/Mill	Elko, NV	DOI	4	в	NAT	Ŷ	ມ	NP
255.	Chromatloy Mining/Mill	Elko, NV	DOI	3	B	NAT	Y	ម	NP
256.	Carlin Gold Mining	, NV	001	1	в	NAT	Y	DY	NP
257.	Dallas Mines, Nevada inc.	, NV	DOI	3	8	AC	Y	U	NP
258.	Nev. Barth Corp.	Emmigrant Summit, NV	001	1	в	AC	¥	U	NP
259.	Minerals Mgt. Inc.	Columbus Marsh, NV	DOT	4	в	AC	Y	U	NP 1
260.	Utah Inti. IncSpringer M.	, NV	001	1	в	AC	Y	U	NP
261.	D&Z Explor. CoPack. Mine	, NV	DOI	2	в	AC	Y	ບ	NP
262.	Jupiter Gold Co+	Humbolt Co., NV	DOI	1	В	NAT	Y	U	NB
263.	Mineral Concentrates/Chem	Humbolt Co., NV	DOI	I	в	NAT	Y	U	NB
264.	Multi-Metallics, Inc.	Winnemucca, NV	DOI	4	8	NAT	Y	υ	NB
265.	Double Eagle, Inc.	Lower Rochester, NV	DO I	1	в	NAT	¥	u	NB
266.	McDermitt Mine	Cordero Mine Rd., NV	001	3	в	AC	Ŷ	DY	MO
267.	Standard Gold Mine	, NV	DOT	1	8	FAR	Y	υ	NP
268.	Pesticide Disposal Site	N+ of Winnemucca, NV	DOI	1	В	AC	N	DY	NP
269.	Quinn River Valley Dispos.	, NV	DO I	1	В	AC	Y	DY	NP
270.	Western States Minerals	, NV	DOI	1	8	NAT	N	DY	NP
271.	Boeing Co., Tulalip IR	Marysville, WA	ĐO1	1 [‡]	в	FAR	Y	PY	NB
272.	Lummi IR Dump	Beilingham, WA	001	1	в	FAR	Y	PY	NB
273.	Texaco-Swinomish IR	Anacortes, WA	DOI	_ 1	в	FAR	Y	PY	NB
274.	Commencement Bay-Tacoma	Tacoma, WA	DO1	5	В	FAR	Y	DY	SE
275.	Marine Disposal-Tulalip	Marysville, WA	D01	1	в	FAR	Y	PY	NB
276.	Commencement Bay-Deep Wat.	Tacoma, WA	DO1	11	в	FAR	Y	DY	SE
277•	Canemera Milling/Smelting	Okanoyan, WA	D01) f	8	FAR	Ŷ	PY	NB
278.	Mt. Toiman, Colville IR	Nespelem, WA	DOT	1	В	AC	Y	u	NP
279.	Commancement Bay-Tide Fits.	Tacoma, WA	DOT	. 3	В	FAR	Y	DY	SE
280.	Bonneville Power-Bell	Spokane, WA	DOE	1	A	AC	Ŷ	U	NP

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	Location name	City and/or state	Agency	sites	location ^a	actions ^b	ERRIS?C	ERRIS?d	location ^e
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281.	Bonneville Power-Midway	Sunnyslde, WA	DOE	1	A	FAR	Y	PΥ	MI
282.	Bonneville Power-Ross Comp.	Vancouver, WA	DOE	1	A	FAR	Y	PY	MO
283.	Pesticide Lab	Yakima, WA	USDA	1	А	FAR	Y	DY	MI
284.	Holden Mine	Holden, WA	USDA	1	в	FAR	Y	PY	h
285.	Albany Research Ctr.	Albany, OR	D01	1	A	FAR	N	U	MI
286.	Pocatello Supply Depot	Pocatello, 10	001	1	Α	AC	N	u	NP
287.	Idaho Nat. Eng. Lab.	Scoville, ID	DOE	13	A	FAR	Y	PΥ	ML
288.	Argonne Nat+ Lab+ (West)	, 10	DOE	1	A	AC	N	U	NP
289.	Hanford Site	Richland, WA	DOE	318	А	AC	Y	PY	MI
290.	Alaska R. R.	Anchorage, AK	DOT	ιť	Α	FAR	Ŷ	PY	NP
291.	Alaska R. R.	Falrbanks, AK	DOT	4	A	AC	Y	PΥ	NP
292.	Chanler Power Plant	Richland, WA	DOI	1	A	AC	¥	u	NP
293.	Grand Coulee Project	Grand Coules, WA	DOI	5	٨	FAR	N	U	MO
294.	Landfill	Grandvlew, ID	DO1	1	8	FAR	Y	PΥ	NP
295.	Pullman Min o	Cottonwood, ID	DOI	1	B	AC	Ŷ	PY	NP
296.	Morgan's Pasture	Shelly, ID	001	11	в	NAT	γ	ΡY	NB
297.	North Creek Mill	Howe, ID	D01	1	8	FAR	Ŷ	ΡΥ	MO
298.	Bunker HIII Co.	Kellogg, ID	DQ1	48	В	FAR	Y	DY	SE
299.	Blue Dome	Blue Dome, ID	DO1	₹f.	8	NAT	Y	PΥ	NB
300.	Lestle Dump	Leslie, ID	DOT	1 f	B	NAT	Y	Ρ¥	NB
301.	Leslie Dump (Sec. 18)	Lestle, ID	DOT	1 f	8	NAT	Y	PΥ	NB
302.	Springfield Unauth. Dump	Springfield, ID	001	1 f	8	NAT	Y	PY	NB
303.	Springfleid Dump (Sec. 14)	Springfield, ID	DOI	I t	8	NAT	Y	PY	NB
304.	Springfleid Dump (Sec. 23)	Springfield, ID	DOI	1 ^f	B	NAT	Y	P۲	NB
305.	Springfield U. D. (Sec. 18)		001	1 f	в	NAT	Y	PΥ	NB
306.	Edmonds Unauth. Dump	Edmonds, 1D	D01	1 ^f	в	NAT	Y	PY	NB
307.	Pesticide Dump Site-Boise	Reynolds, ID	DOI	1	в	NAT	Y	ΡY	NP
308.	Pesticide Dump Site-Murphy	Murphy, 1D	D01	1	в	FAR	Y	PY	NP
309.	Upper Little Lost Un. Dump	Clyde, ID	DOI	it.	в	NAT	Y	ΡY	NB
310.	Hell's Half Acre	Idaho Falls, 1D	DOI	j.f	B	NAT	Y	PY	NB
311.	Owyhee Co.	Marsing-Homedale, I		1	8	FAR	Ŷ	PΥ	NP
312.	Owyhee CoWilson Crk.	Marsing, ID	DOI	1	8	FAR	Ŷ	PY	NP
313.	Central Cove	Caldwell, ID	DOI	2	B	FAR	Ŷ	PY	NP
314.	Cedar Butte S. End	Rockford, ID	DOI	, jf	В	NAT	Ŷ	PY	NB
315.	Howe Dump Site	Howe, ID	DOI	1†	В	NAT	Y	PY	NB
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	Location name	City and/or state	Agency	sites	location ^a	actions ^D	ERRIS7 ^C	ERRIS?d	location [®]
316.	Tesoro Alaska Petro.	Kenal, AK	DOT	2	8	FAR	Y	PY	мо
317+	Demarcation Bay Dewiine	Artic NWR, AK	DOT	1	С	FAR	N	U	MI
318+	Yukon Delta NWR	, AK	DOI	1 f	С	FAR	N	U	MO
319.	Alaska Maritime NWR	, AK	D01	11	С	FAR	N	U	SE
320.	Union Oil of CaKenal	N. Kenai, AK	DO I	1	В	FAR	Y	PY	MO
321.	Arctic NWR-Beaufort Lagoon	, AK	001	1	¢	FAR	N	U	МІ
322.	Arctic NWR (Camden Bay)	, AK	DOÍ	1	С	FAR	N	U	MO
323.	Arctic NWR (Brownlow Pt.)	, A K	DO 1	1	С	FAR	N	U	MO
324.	Chevron Refinery	Kenal, AK	DOI	1	8	FAR	Y	PΥ	Mł
325.	Lummil Shore Dump	Lummi IR, WA	DOT	1	A	NAT	N	PY	NB
326.	Hell's Half Acre E. Finger	Firth, ID	DOI	1	B	NAT	Y	ΡY	NB
327 -	Hell's Half Acre W. Finger	Firth, 10	ĐOT	1	в	NAT	Y	₽Y	NP
328+	DeLamar Mine	Silver City, ID	DOF	1	в	FAR	Y	PY	NB
329.	Dawn Mine	Spokane IR, WA	DOI	ł	8	FAR	N	ບ	MI
330.	Bering Land Bridge	, AK	DOI	1	С	FAR	N	U	NP
331.	Denall NP	, AK	DO1	1	С	FAR	N	U	NP
332.	Solid Waste Site	Albion, 1D	DOI	1	8	AC	Y	PY	NB
333.	Lake Clark NP	, AK	DOT	2	С	FAR	N	U	NB
334.	Yukon-Charley Rivers NP	, AK	DO1	1	С	FAR	N	U	NB
335.	Urangell-St. Ellas NP	, AK	DOI	۱f	С	FAR	N	U	NB
336.	Katmal NP	, AK	DOI	2	С	FAR	N	U	NB
337.	NW Alaska Areas (Park Gen.)	, AK	DOI	1	С	FAR	N	U	NP
338.	Cape Krisenstern	, AK	DOT	1	С	FAR	N	U	NP
339.	Glacler Bay NP	, AK	DOI	2	С	FAR	N	U	NP
340.	Noatak Nat. Preserve	, AK	DO 1	3	С	FAR	N	U	NP

^aType of location is defined as follows: A-created by agency, B-possibly created by private entity, and C-possibly created by 000.

^bStatus of actions at locations is defined as follows: AC-action completed, FAR-further action required, and NAT-no action taken.

^CWas the location in the ERRIS data base as of February 1, 1984? Answers are: Y-yes and N-no.

dShould the location be in the ERRIS data base based on EPA regional office officials' opinions? Answers are:

DY-definitely yes, PY-probably yes, U-uncertain, PN-probably not, and DN-definitely not.

^eWhat is the current assessment of the degree to which the location poses a problem or potential problem to public health or the environment based on agency regional/field office officials' opinions? Answers are: SC-serious problem, MO-moderate problem, MI-minor problem, NP-no problem, and NB-no basis to judge.

^fUnknown number of sites at location; assumed that location had at least one site.

9Location had 43 sites (8 moderate problem, 1 minor problem, 1 no problem, and 33 no basis to judge).

^hKnowledgeable agency official could not be located for this location.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

SEP 5 1984

OFFICE OF POLICY, PLANNING AND EVALUATION

Mr. J. Dexter Peach Director Resources, Community and Economic Development Division U.S. General Accounting Office Washington, D.C. 20548

Dear Mr. Peach:

On August 1, 1984, the General Accounting Office (GAO) sent the Environmental Protection Agency (EPA) a draft report for comment. The report is entitled "Status of Civilian Federal Agencies' Efforts To Address Hazardous Waste Problems on Their Lands" (GAO/RCED-84-188). As required by Public Law 96-226, EPA submits this formal response on the draft report for GAO's use when preparing the final report.

The draft report accurately characterizes EPA's efforts to elevate the priority for oversight of and technical assistance to other agencies in their attempts to satisfy their obligations under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). It properly notes statutory limitations on EPA's opportunity to take direct response actions where Federal lands are concerned.

The draft report's recommendation to the Administrator on page 22 is that the Regions be instructed in the importance of keeping the Emergency and Remedial Response Information System (ERRIS) accurate and up-to-date. For the general purposes to which ERRIS is put, it is desirable, but not critical, that sites be coded as to ownership by Federal agencies. Lee Thomas, Assistant Administrator for Solid Waste and Emergency Response, wrote to each Region on this subject in May. In his memorandum, he stressed the need for timely entry of completions of Preliminary Assessments and Site Investigations into this data base.

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The recommendation of the Administrator also discusses the deletion from ERRIS of those locations on Federal lands "that lack the potential for uncontrolled hazardous waste sites." EPA strongly disagrees with this portion of the recommendation. EPA policy has always been to list in ERRIS every potential uncontrolled hazardous waste site. When a site is determined to be no hazard, for any reason, whether a problem never existed or when remedial action is complete, EPA notes the site is no further hazard in ERRIS, but it remains on the list. Practically speaking, unless it is on the list, it becomes impossible to track when answering later inquiries about a site and there is a strong possibility it could cycle back and enter the system again causing wasted or duplicative effort. Also, EPA often references previous investigations in the nearby geographic area to avoid duplicating expensive investigative efforts. If a site was deleted, there would be no way to reference data in the deleted file through the automated system.

The report describes the broad outlines of a strategy EPA is developing to foster the cleanup of Federal sites, and the results of the request for comments on the strategy. EPA was pleased to note that comments of the Regional staff and other Agency personnel were generally favorable. As the operational details of the strategy are developed, EPA will be conferring with its Regional staff and other agencies.

In the description of EPA's new Federal facilities compliance strategy on page 34, GAO states that if Federal agencies are unable to fund cleanup activities by reprogramming appropriated funds, "the CERCLA fund would be used and later reimbursed by the Federal agency." This option is unavailable for remedial actions on Federal lands because CERCLA §111(e)(3) forbids the use of Fund monies for remedial actions at Federally owned facilities. EPA's Federal facilities compliance strategy recognizes this restriction. GAO's description of the strategy should note this restriction as well.

[GAO Comment: The report recognizes the restriction mentioned by EPA on pp. i and 3. However, we have added another sentence to this report on p. 34 to more clearly state that this restriction exists.]

I appreciate the opportunity to comment on the draft report and I hope that this response is helpful to GAO in preparing the final report.

Sincerely yours,

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Milton Russell Assistant Administrator for Policy, Planning and Evaluation

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]

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Forest Service Washington Office 12th & Independence SW P.O. Box 2417 Washington, DC 20013

1420 GAO Audits

Date 203 0 0 1984

Subject GAO Draft Report RCED-84-188

J. Dexter Peach, Director Resources, Community and Economic Development Division 440 G. St. N.W. Washington, D.C. 20548

We have reviewed the GAO draft report and have the following comments:

The primary focus of the report is directed at EPA's management of the Emergency and Remedial Response Information System (ERRIS) and their responsibilities for implementing the Comprehensive Environmental Response, Compensation, and Liability Act (CERCIA) of 1980 and Executive Order 12316. Since the emphasis is on the EPA data base, the report title appears to be inconsistant with its content. We recommend it be changed to "Status of EPA's Efforts to Monitor Hazardous Waste Problems on Civilian Federal Agencies' Land."

[GAO Commment: The primary focus of this report is the status of federal agencies' efforts to identify, assess, evaluate, and, if appropriate, correct problems associated with uncontrolled hazardous waste site locations. The report title is appropriate based on the report's content.]

The one USDA site identified in the report (Metabolism and Radiation Research Laboratory in Fargo, ND, page 55) does not have any waste storage sites but is a low volume waste generator. The laboratory has made arrangements in compliance with State requirements for proper disposal of wastes by approved methods. EPA has been informed, through the State of North Dakota, that there is not now, nor ever has been, hazardous conditions or incidents at this location. A further search of Agency files has not identified any 103(c)notification being sent by the Laboratory or any other ARS office; therefore, the statement contained on page 55, paragraph 2, sentence 2 is correct.

We believe that the forthcoming revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (pursuant to Section 105 of the CERCIA) will significantly clarify and streamline the reporting and response requirements of the Act. I have been delegated authority to represent the Department on the National Response Team (NRT) (40 FR 47722) that has responsibility for the NCP. Fred Honing, FPM, is serving as the USDA team member. As soon as the revised NCP is issued, the Forest Service will need to work closely with key Agencies in the Department to insure full compliance with the provisions of CERCIA.

We appreciaze the opportunity to review the GAO draft report.

R. MAX PETERSON Chief

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]



National Aeronautics and Space Administration

Washington, D.C. 20546

Reply to Attn of NIP

AUG 3 1 1984

Mr. Frank C. Conahan Director National Security and International Affairs Division United States General Accounting Office Washington, DC 20548

Dear Mr. Conahan:

Thank you for the opportunity to comment on the GAO draft report entitled, "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands."

NASA is in agreement with the GAO report with the exception of a request to clarify the inclusion of the Mississippi Army Ammunition Plant as a NASA facility. Specific comments are provided in the enclosure.

[GAO Comment: Because it granted the U.S. Department of the Army a 50-year permit in July 1978 to operate an Army activity on NASA's lands, NASA stated that this location should not be considered its responsibility. We disagree because the location is, in fact, on NASA's lands. We do show in appendix V on p. 68 that this NASA location was classified as possibly created by DOD.]

Sincerely,

C. Robert Nysulth Associate Administrator for Management

Enclosure

General Services Administration Washington, DC 20405



AUG 31 1984

Honorable Charles A. Bowsher Comptroller General of the United States General Accounting Office Washington, DC 20548

Dear Mr. Bowsher:

This is in response to the General Accounting Office (GAO) draft report entitled, "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands" (GAO/RCED-84-188). As one of the 16 Federal agencies discussed in this report, the General Services Administration (GSA) concurs with your findings as they relate to the agency. Since no GAO recommendations were directed to GSA, we have no substantive comments to make other than to express our intent to work with other Federal agencies to resolve any hazardous waste site problems involving GSA-controlled land. To this end, GSA welcomes EPA's strategy (as discussed in the audit report) to assure Federal facility compliance. The initial guidance and training EPA is proposing to provide will be invaluable to GSA and other agencies which do not have major waste sites, yet which feel the necessity to institute their own programs commensurate to the potential problem level.

Thank you for the opportunity to respond to the draft audit report.

Ray Kline Acting Administrator



THE POSTMASTER GENERAL Washington, DC 20260-0010

August 31, 1984

Dear Mr. Anderson:

This refers to your draft report entitled, "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands" (RCED-84-188).

As the report correctly notes, the nature of the Postal Service's operations precludes our having any hazardous waste sites located on our properties, and we have no proposals to offer regarding strategies to insure compliance by Federal facilities with regulations in this area.

Sincerely, Bølger

Mr. William J. Anderson Director, General Government Division U.S. General Accounting Office Washington, D. C. 20548–0001 Office of the Administrator of Veterans Affairs Washington DC 20420

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AUGUST 31 1984

Mr. Richard L. Fogel Director, Human Resources Division U.S. General Accounting Office Washington, DC 20548

Dear Mr. Fogel:

Your August 1, 1984 draft report "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands" has been reviewed. The report accurately describes the status of Veterans Administration (VA) involvement in addressing potential or known problems resulting from past hazardous waste disposal activities at VA sites or on VA-owned lands. As stated in the report, the VA had no systematic analysis of facilities. However, this is being remedied in line with the Environmental Protection Agency strategy.

The Department of Medicine and Surgery Circular 10-84-120, "Assessment of Hazardous Waste Disposal at VA Facilities," was distributed to VA facilities on July 31, 1984. This Circular (copy enclosed) directs a self-assessment of past and present waste disposal practices by means of a comprehensive questionnaire. The responses will be reviewed to determine what further action may be required. In addition, the findings resulting from the questionnaire will be shared with the VA Office of Construction so they may evaluate and incorporate the appropriate information in construction project planning.

Although not addressed in this report, the overall identification, utilization, and disposal of hazardous material is of concern to us. While there are specific instructions for disposing of certain known hazardous items such as radioactive materials, we are concerned about the possibility of other hazardous material being disposed of inappropriately. The Veterans Administration would welcome comprehensive regulations covering the entire spectrum — acquisition, onsite use, and disposal of hazardous materials.

Thank you for the opportunity to review this report.

Sincerely,

HARRY N. WALTERS Administrator

Deputy Administrator + For

Enclosure

APPENDIX XII

APPENDIX XII



DEPARTMENT OF THE ARMY OFFICE OF THE ASSISTANT SECRETARY WASHINGTON, DC 20310

6 SEP 1984

Mr. J. Dexter Peach Director, Resource, Community, and Economic Development Division U.S. General Accounting Office Washington, D. C. 20548

Dear Mr. Peach:

This is in response to your August 1, 1984, letter to the Secretary of Defense requesting comments on the draft GAO report, "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands," GAO/RCED-84-188 (OSD Case No. 6572).

The Department of Defense (DoD) generally agrees with information contained in your report as it pertains to this Department. However, information on the Installation Restoration Program of DoD contained on page 20 should be clarified to indicate that the sites reported are only potential sites and may not be the responsibility of DoD. Alternatively you may wish to cover this material in the separate report noted on page 1 which will cover the DoD Installation Restoration Program.

[GAO Comment: We have changed the wording on pp. 20 and 21 of the report to more clearly indicate that the sites reported are only potential sites and may not be the responsibility of DOD.]

Sincerely,

Kobert K. Dawson Acting Assistant Secretary of the Army (Civil Works)

TENNESSEE VALLEY AUTHORITY KNOXVILLE, TENNESSEE 37902

OFFICE OF THE BOARD OF DIRECTORS

SEP 6 1984

Mr. J. Dexter Peach, Director Resources, Community, and Economic Development Division U.S. General Accounting Office 441 G Street, NW. Washington, D.C. 20548

Dear Mr. Peach:

This refers to your August 1 letter concerning the draft U.S. General Accounting Office report RCED-84-188 <u>Status of Civilian Federal Agencies'</u> <u>Efforts To Address Hazardous Waste Problems on Their Lands</u>. TVA has no comment on the report and appreciates having been afforded the opportunity for review.

For your further information, during the last three weeks, corporate management has become aware of the presence of waste phosphorous sludge on property in TVA custody at the National Fertilizer Development Center in Muscle Shoals, Alabama. The material was a byproduct of the operation of electric arc furnaces to process phosphate ore for fertilizer. The NFDC furnaces ceased operation in 1976, and the sludge identified at that time was entombed on the site. The additional material we have become aware of is contained in two 40,000 gallon tanks, 12 railroad tank cars, and a concrete-lined sump. These containers have been inspected and are in good condition with no evidence of leakage. At this time, the material does not appear to be commercially useful, and we have determined that it should properly be considered waste. We have notified the Environmental Protection Agency and the Alabama Department of Environmental Management of the presence of this material and of our intention to coordinate disposal plans with them.

[GAO Comment: Because the location has just become known to TVA, it has not been included in any of the information contained in this report.]

Sincerely,

C. H. Dean, Jr.

Chairman .

APPENDIX XIV

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

SEP - 7 1984

Mr. Richard L. Fogel Director, Human Resources Division United States General Accounting Office Washington, D.C. 20548

Dear Mr. Fogel:

The Secretary asked that I respond to your request for the Department's comments on your draft report "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands." The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

We appreciate the opportunity to comment on this draft report before its publication.

Sincerely yours,

Richard P. Kusserow Di Inspector General

Enclosure

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COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES ON THE GENERAL ACCOUNTING OFFICE'S DRAFT REPORT, "STATUS OF CIVILIAN FEDERAL AGENCIES' EFFORTS TO ADDRESS HAZARDOUS WASTE PROBLEMS ON THEIR LANDS"

General Comments

The Department of Health and Human Services (HHS) concurs with the General Accounting Office's (GAO) recommendation that the Environmental Protection Agency (EPA) update and correct the Emergency and Remedial Response Information System (ERRIS) data base. Additionally, we recommend that EPA advise an agency when EPA places an agency's site in the ERRIS data base. We were unaware that EPA had included HHS sites in ERRIS. Therefore, we were not in a position to offer a rationale to EPA for suggesting that at least one site was inappropriately placed in the data base, or to alert EPA of agency actions which would adjust the status of sites (in regard to site assessment, evaluation, etc.).

The GAO report as written does not reflect fully the attention given in HHS by the few components which have the potential for having hazardous waste sites. We agree that the requirement for reporting hazardous waste sites may not have been implemented in as organized and formal a manner as desirable; however, we do not agree with the impression left by the HHS portion of the report that little knowledge exists or little attention has been given to this important activity in HHS. In the section below, we recommend specific changes which will reflect more accurately the situation within the Department.

Specific Comments

We recommend that the following specific changes be made in the text of the GAO report on pages 51 and 52:

CERCLA Section 103(c)

- Sentence 2 Delete ". . . EPA did not notify them in writing about. . . " and insert in lieu thereof ". . they had received no guidelines from EPA regarding. . . "
- 2. Sentence 3 Delete ". . . HHS field organizations . . . " and insert in lieu thereof ". . . the HHS organizations with potential for sites"
- 3. Sentence 4 Delete ". . . that made an " and insert ". . . which had made a formal"

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Page 2

- 4. After sentence 4, insert the following new sentence: "The other agencies relied on knowledge of current practices and institutional memory to make a negative reply."
- 5. Sentence 5 Delete "Its . . . " and insert "The NIH"

These clarifying changes would modify the paragraph to read more accurately as follows:

HHS did not report any sites to EPA under CERCLA Section 103(c). HHS headquarters officials from the Office of Facility Engineering and Office of Safety and Health told us that they were aware of the requirement but had not issued any guidance to HHS field organizations because they had received no guidelines from EPA regarding the requirements. However, an HHS official from the Office of Safety and Health informed us that he made selective telephone calls to the HHS organizations with potential for sites to see if any such sites could exist, and officials informed him that none existed. The National Institutes of Health was the only component of HHS which had made a formal independent attempt to identify such sites as a result of the 103(c) notification requirement. The other agencies relied on knowledge of current practices and institutional memory to make a negative reply. The NIH Environmental Protection Branch did not identify any sites as a result of identification efforts, which consisted of doing record searches for past disposal practices, interviews of employees, site visits, and soil samples.

New Initiatives

 At the end of the first paragraph, insert the following new sentence: "The Circular did not require a negative report, however."

This sentence would clarify why other HHS components did not provide reports in response to the circular.

2. Paragraph 2, delete the second sentence which reads "The Chief, Environmental Assessment Section for the Perrine, Florida, facility also stated that his office was in the process of developing such a program."

APPENDIX XIV

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Page 3

This change would correct the impression that the Perrine facility has an Environmental Assessment Section. Perrine does not have such an organizational component; it is part of the National Institutes of Health Environmental Protection Branch which is referenced in the preceding sentence on page 52. Also, the audit program for Perrine is part of the same audit program mentioned in the preceding sentence.

[GAO Comment: The report was changed on pp. 51 and 52 to reflect HHS' suggested wording changes.]

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]

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United States Department of the Interior

OFFICE OF THE SECRETARY WASHINGTON, D.C. 20240

SEP 7 1984

J. Dexter Peach, Director U.S. General Accounting Office Washington, D.C. 20548

Dear Mr. Peach:

We appreciate the opportunity to review and provide comments on the proposed report regarding Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands, sent to us August 1, 1984. We would like to compliment your staff on their objectivity and professionalism in their contacts with our offices. We are pleased to note that the report clearly recognizes the many problems that Interior and other Federal agencies have encountered in attempting to comply with RCRA and CERCLA. We have no major corrections to suggest or areas of disagreement with the conclusions arrived at.

We are very much interested in the proposed EPA Strategy to Assure Federal Facilities Compliance with CERCLA. While various DOI staff provided informal comments to GAO staff in regard to the proposed strategy, the Department has not as yet received a request from EPA for review of this paper. It is noted that EPA planned individual meetings to discuss the strategy with the various agencies in July and August 1984, so that the agencies FY 86 budget plans would reflect CERCLA activities. Interior has not as yet been approached regarding such a meeting. The Department's budget submittal for FY 86 is in its final stages now and unanticipated programs may have to be funded from fixed levels or postponed to FY 87.

We note that others besides Interior have found problems with the errors, omissions and poor data in the ERRIS list. Our field offices have had great difficulty in their efforts to identify or locate sites from the list or to obtain backup data regarding specific listed sites from either EPA regional offices or appropriate state agencies. We are seriously concerned if EPA management expects to rely on the present list for programmatic and budgetary decisions. We agree with GAO's recommendation that EPA instruct its regional offices as to the importance and need for complete and accurate information in the ERRIS list. We suggest further that, if the list is to serve as a basis for program and budget decisions, the guidance as to complete and accurate information not be limited to the potential hazardous waste sites on federal lands but extended to all sites on the ERRIS list. Also, guidance should be given regarding periodic updating of the list to reflect completed site investigations and cleanup/remedial actions.

One area of confusion that should be clarified is the discussion of DOI initiatives (p. 39 and 48). This confuses the guidance as to programs and procedures for compliance with RCRA and CERCLA and the subsequent request for FY 86 budget information. We suggest the following wording:

J. Dexter Peach, Director

Page 39

DOI

DOI's Assistant Secretary for Policy, Budget, and Administration requested in May 1983, that all DOI bureaus develop programs and procedures tailored to meet their needs to ensure that CERCLA responsibilities are fully met. The programs would include procedures for hazard ranking, remedial investigation, and remedial action at DOI's hazardous waste site locations. In May 1984, the Secretary, as part of his budget formulation process for fiscal year 1986, requested from each bureau information on (1) the number of sites that have been ranked and will be ranked in the future using EPA's hazard ranking system, (2) the number of remedial investigation plans prepared and that will be prepared in the future, and (3) the number of remedial investigation plans for which remedial actions have been completed and that will be completed in the future. While funding information was still being developed, some bureaus did have estimates of potential program costs. For example, the Bureau of Land Management estimated that it would cost \$1.3 million annually to establish a program and policies for hazardous waste control and to begin identifying, evaluating, and initiating remedial actions at 22 waste sites. The Bureau of Indian Affairs estimated \$7 million to test and cleanup 14 identified sites.

[GAO Comment: We have changed the report on p. 39 to reflect DOI's suggested wording.]

Page 48

New Initiatives

As part of its budget justification process for fiscal year 1986, DOI has continued efforts concerned with compliance with CERCLA. In May 1983 the Assistant Secretary for Policy, Budget, and Administration requested that all DOI bureaus develop programs and procedures tailored to meet their needs to ensure that CERCLA responsibilities are fully met. The program would include, among other things, site inventory procedures. In May 1984 the Secretary of the Interior as a part of his FY 86 budget call requested from each bureau a number of items in the site inventory category, including the total number of acres they will inventory, the percentage of bureau lands already inventoried to date, the number of known inactive sites, and the month and year all inventories will be completed.

[GAO Comment: We have changed the report on p. 48 to reflect DOI's suggested wording.]

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In addition, we are interested in the statistics that GAO has gathered in regard to status of actions and estimates of problems posed at the various sites, as shown in tables on pages 25, 26 and 56. We would appreciate a copy of the input to the DOI portions of these tables.

[GAO Comment: We have included in the final report, as appendix V, summary information on each of the 340 hazardous waste site locations.]

Thank you again for the opportunity to review this draft report. We would be pleased to provide any further assistance that you may desire.

Sincerely,

phi W. Gomeso

Deputy Assistant Secretary - Policy, Budget and Administration

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]

APPENDIX XVI



Assistant Secretary for Administration 400 Seventh St., S.W. Washington, D.C. 20590

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SEP 1 0 1984

Mr. J. Dexter Peach Director, Resources, Community and Economic Development Division U.S. General Accounting Office Washington, D. C. 20548

Dear Mr. Peach:

This is in response to your letter requesting Department of Transportation (DOT) comments on the General Accounting Office (GAO) draft report, "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands," dated August 1, 1984.

The report states that civilian Federal agencies have made efforts to identify potential hazardous waste sites on their lands or under their control and to subsequently assess, evaluate, and clean up such sites, if warranted. GAO found that the Environmental Protection Agency's (EPA) data system, which shows potential hazardous waste site locations and the status of actions performed, was incomplete. GAO recommends that EPA update and correct the data system.

The Department agrees with GAO's findings and recommendation that EPA correct the data system. We note, however, that the GAO remark that only one of four DOT organizations responded to the Office of the Secretary of Transportation (OST) request for a survey of the Resource Conservation Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), is misleading. While all DOT organizations contacted responded to the CERCLA part of the survey which applies to the GAO report, no need was found for further action under the provisions of CERCLA.

The Department recommends that EPA reinstate the practice of calling headquarters-level meetings to distribute and discuss information of major importance such as the April 15, 1984, notice of CERCLA requirements.

If we can be of further assistance, please let us know.

Sincerely,

Enclosure

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DEPARTMENT OF TRANSPORTATION REPLY TO GAO DRAFT REPORT OF AUGUST 1, 1984 ON STATUS OF CIVILIAN FEDERAL AGENCIES' EFFORTS TO ADDRESS HAZARDOUS WASTE PROBLEMS ON THEIR LANDS

SUMMARY OF GAO FINDINGS AND RECOMMENDATIONS

Civilian Federal agencies have made efforts to identify potential hazardous waste sites on their lands or under their control and to subsequently assess, evaluate, and clean up such sites, if warranted.

- -- Eleven of 16 Federal agencies were aware of 340 potential hazardous waste site locations on their lands or under their control.
- -- Assessment, evaluation, and corrective action at the 340 locations ranged from 105 where no action had been taken to 73 where Environmental Protection Agency (EPA) or other Federal agency officials had concluded that no further action was warranted. Some action had been taken at the remaining 162 locations, but additional actions were needed.

EPA and seven agencies have under way or plan new initiatives to focus civilian Federal agencies' attention on hazardous waste site identification, assessment, evaluation, and clean-up issues. A key effort is EPA's new strategy to assure Federal facilities' compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

GAO found that EPA's data system, which shows potential hazardous waste site locations and the status of actions performed, was incomplete. GAO recommends that EPA update and correct the data system.

SUMMARY OF DEPARTMENT OF TRANSPORTATION POSITION

- . We agree with GAO's findings and recommendation that EPA correct the data system.
- . The GAO remark that only one of four DOT organizations had responded to the OST request for a survey of RCRA and CERCLA compliance is misleading and serves no purpose. It implies inactivity and unresponsiveness on the part of our operating administrations. All DOT organizations contacted have responded to the CERCLA part of the survey which applies to this GAO report, and no need was found for further action under the provisions of CERCLA.
- Due to a lack of CERCLA projects within DOT, other than for Coast Guard, a Department-wide program according to the proposed EPA strategy would be an expensive effort with limited results.

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. We recommend EPA reinstate the practice of calling headquarters-level meetings to distribute and discuss information of major importance such as the April 15, 1981, notice of CERCLA requirements.

POSITION STATEMENT

We agree with the findings of GAO including the recommendation that EPA update and correct the data system.

We believe the statement by GAO in the DOT "New initiatives" paragraph that only one of four organizations had replied to the Office of the Secretary's request for information to demonstrate compliance with RCRA and CERCLA is misleading and serves no purpose. It implies inactivity and unresponsiveness on the part of the operating administrations of DOT. The time-consuming part of the survey involved RCRA compliance not CERCLA. Time extensions were freely granted in order to make a thorough survey. At this time five administrations have reported they found no abandoned or uncontrolled dumps and cannot foresee any action to be taken under CERCLA. These five administrations are FAA, FHWA, SLSDC, MARAD and RSPA. Except for CG, none of the other administrations of DOT owns or operates facilities.

[GAO Comment: As our draft report correctly stated, only DOT'S Research and Special Programs Administration had replied to RCRA and CERCLA survey as of June 26, 1984. Because DOT's comments state that as of September 10, 1984, other administrations have since responded to the survey and that no abandoned or uncontrolled dumps were reported, we have changed the report on p. 50 to incorporate this new information.]

The remarks of the FHWA were misunderstood by GAO (see page 61). FHWA is in favor of a strategy or any guidance that can be obtained from EPA. FAA reports a number of complaints from regional personnel about the lack of support and information provided by regional EPA offices. On the matter of the EPA strategy, now that we apparently have no CERCLA activity other than Coast Guard, we agree with the statement by General Services Administration that a comprehensive CERCLA program could become an expensive effort with limited results.

[GAO Comment: The report was changed on p. 61 to incorporate this new information.]

We recommend EPA's Office of Federal Activities headquarters reinstate the practice of calling a meeting of agency headquarter points of contact to (1) hand out such information as the April 15, 1981, Federal Register notice on CERCLA, (2) explain what it means, and (3) explain what the Federal agencies are expected to do. For years prior to 1981 matters of importance were handled in this way. We had come to depend on EPA to inform us of important actions. The CERCLA notice was mailed out without emphasis on action expected. We offer this as an explanation of why so many agencies as well as DOT took little or no action on the April 15, 1981, notice.

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]

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APPENDIX XVII



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT WASHINGTON, D.C. 20410

OFFICE OF THE ASSISTANT SECRETARY FOR COMMUNITY PLANNING AND DEVELOPMENT

SEP 1 3 1984

Mr. J. Dexter Peach Director, Resources, Community, and Economic Development Division United States General Accounting Office Washington, DC 20548

Dear Mr. Peach:

We received and reviewed the GAO draft report entitled "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands." Overall we found the report comprehensive and informative. Our only comment follows:

> Page 52, Appendix I, subsection <u>CERCLA Section 103(C)</u>, second sentence, change reference from "Office of Environmental Planning" to "Office of Environment and Energy."

[GAO Comment: We have changed the report on p. 52 to reflect HUD's suggested wording.]

Since HUD does not have any hazardous waste sites, most of the report's conclusions and recommendations do not affect HUD directly. However, because some HUD programs may involve activities on land which may have once been federally owned or managed, there is a minimal possibility that HUD program recipients may be affected. With that consideration we strongly support the inclusion of Federal hazardous site locations on the National Priorities List and the updating and corrections to the ERRIS Data System.

Please include us in your distribution of final report, when its available.

Sincerely, Alfred 'C. Moran

Special Assistant to the Secretary

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]



UNITED STATES DEPARTMENT OF COMMERCE The Assistant Secretary for Administration Washington, D.C. 20230

SEP 1 7 1984

Mr. J. Dexter Peach Director, Resources, Community, and Economic Development Division United States General Accounting Office Washington, D.C. 20548

Dear Mr. Peach:

This is in reply to GAO's letter of August 1, 1984, requesting comments on the draft report entitled "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands" (GAO/RCED-84-188).

We have reviewed the enclosed comments of the Deputy Administrator of the National Oceanic and Atmospheric Administration and believe they are responsive to the matters discussed in the report.

Sincerely,

Kay Bulow Assistant Secretary for Administration

Enclosure



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration Washington D C 20230

THE DEPUTY ADMINISTRATOR

SEP 7 1984

Mr. J. Dexter Peach Director, Resources, Community and Economic Development Division General Accounting Office Washington, D. C. 20548

Dear Mr. Peach:

I am responding to your August 1, 1984, letter to Secretary Baldrige requesting comments on the proposed General Accounting Office report entitled, "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on their Land." The draft report has been reviewed by appropriate offices within the Department of Commerce (DOC), including the National Oceanic and Atmospheric Administration (NOAA), which has been delegated certain responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) by the Secretary. Our comments will refer only to those sections of the report treating DOC/NOAA.

The draft report notes accurately on page 44 that the Department did not report any hazardous waste sites to EPA in response to Section 103(c) of CERCLA. It also refers correctly to our May 25, 1984, survey of all DOC organizational components. However, the report overlooks the Department's 1983 effort to identify possible hazardous waste sites at its facilities through the A-106 questionnaire on Federal pollution abatement activities. We suggest the following changes to correct this omission:

Page 44 -- Other Efforts

Delete "None" and insert the following:

As directed by EPA's November 25, 1983, memorandum requesting an update of the A-106 report, including agency CERCLA and RCRA activities, the Department's National Oceanic and Atmospheric Administration requested information on hazardous waste sites from all Departmental organizational components believed to use hazardous materials. No sites were identified in the responses to this request.

Page 13 -- Other Efforts

The second sentence of the final paragraph should be modified to indicate that at least one agency, the Department of Commerce, did initiate a new site identification effort as the result of EPA's A-106 guidance.

[GAO Comment: During discussions held with DOC officials in March 1984, we were informed that DOC, through its National Oceanic and Atmospheric Administration, sent a December 15, 1983, memorandum to its various organizations notifying them of the A-106 requirements (EPA's November 25, 1983, memorandum was attached to DOC's memorandum). These officials also informed us that no information was received identifying potential hazardous waste sites and they knew of no special efforts made to identify CERCLA sites. This situation has since been confirmed because DOC's new initiative--the May 25, 1984, request for information from all of DOC's components -- is seeking information to determine if they have any hazardous material sites or knowledge of releases of hazardous materials at any of their locations and to document their findings. Had DOC performed site identification activities resulting from the November 25, 1983, A-106 guidance, there would have been no reason to undertake the May 25, 1984, initiative. As a result, we have made no changes to the DOC information in the report.]

We plan to make the results of our May 25 survey available to you and to EPA after all the responses are received and evaluated. In the meantime, we appreciate the opportunity to comment on GAO's draft report on this important program. If your staff have any questions about this response or the Department's continuing activities under CERCLA, I suggest they contact George Kinter, our Superfund Program Manager, on 443-8465.

Sincerely,

Inthony Later Anthony J. Falio

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]

APPENDIX XIX



ASSISTANT SECRETARY

DEPARTMENT OF THE TREASURY WASHINGTON, D.C. 20220

CED 1 9 1084

Dear Mr. Anderson:

Reference is made to your letter of August 1, 1984, to Secretary Regan whereby you forwarded for review and comment the U.S. General Accounting Office draft report on the <u>Status</u> of <u>Civilian Federal Agencies' Efforts to Address Hazardous</u> Waste Problems on Their Lands.

We have no comments on the substance of the draft report. Page 54 (Appendix Section I) of the draft report states, however, that "the nature of the Department's operations preclude it from having potential sites located on its property." To confirm the accuracy of this statement, we are initiating a preliminary survey of our bureaus to assure that we are in compliance with the provisions of the 1980 Comprehensive Environmental Response, Compensation and Liability Act.

[GAO Comment: Because the survey was not initiated or planned at the time of our review, we have not included it in the information presented in this report.]

Sincerely,

Terence C. Golden Assistant Secretary (Administration)

Mr. William J. Anderson Director, General Government Division U.S. General Accounting Office Room 2427-M 401 M Street, SW Washington, DC 20548

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.]

ADDRESS OF THE TAXABLE



U.S. Department of Justice

September 20, 1984

Washington. D.C. 20530

Mr. William J. Anderson Director General Government Division United States General Accounting Office Washington, D.C. 20548

Dear Mr. Anderson:

This letter responds to your request to the Attorney General for the comments of the Department of Justice (Department) on your draft report entitled "Status of Civilian Federal Agencies' Efforts to Address Hazardous Waste Problems on Their Lands."

The Department agrees that the Environmental Protection Agency's (EPA) new strategy to focus civilian federal agencies' attention on hazardous waste site identification, assessment, evaluation, and cleanup is worthwhile. The Bureau of Prisons and other component organizations within the Department recognize their obligations to assure environmental health protection and will, within existing resource limitations, cooperate fully with EPA to assure prompt compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Where additional resources are needed to meet our obligations, the Department plans to identify those needs and to request appropriate funding from the Office of Management and Budget and the Congress.

In reviewing the draft report, we note the following statement on page iii of the Digest:

"Recognizing that EPA had placed a low priority on federal facilities and their CERCLA-type activities in the past, EPA's Assistant Administrators for External Affairs and Solid Waste and Emergency Response now believe that EPA has an obligation to ensure hazardous waste site identification and cleanup at federal facilities."

Although EPA recently announced a plan to include federally-owned sites on the National Priorities List (NPL), despite a statutory prohibition against most uses of CERCLA funds to finance response activities at such sites, EPA's past practice of declining to include them on the NPL was not, to the Department's knowledge, intended to reflect a judgment that such sites were of a "low We appreciate being given the opportunity to review and comment on the draft report. Should you have need for further information, I trust you will let me know.

Sincerely,

Anthony C./Liotta Assistant Attorney General for Administration

[GAO Note: Page references in this appendix which referred to our draft report were changed to reflect their location in this final report.] Request for copies of GAO reports should be sent to:

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U.S. General Accounting Office Document Handling and Information Services Facility P.O. Box 6015 Gaithersburg, Md. 20760

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The first five copies of individual reports are free of charge. Additional copies of bound audit reports are \$3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are \$1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents". Through the 12-digit identification number assigned to each ERRIS location, federally-owned locations are distinguishable from private ones. The identification number establishes which locations are DOD as well as those that are non-DOD. At the time we began this review in February 1984, ERRIS listed nearly 17,100 potential locations, with 517 having federal identification numbers. Of the 517 federal locations, 103 had non-DOD identification numbers and the remaining 414 had DOD numbers. The following non-DOD federal agencies had ERRIS locations coded to them.

U.S. Army Corps of Engineers (Civil Works)⁵ (COE) Department of Agriculture (USDA) Department of Energy (DOE) Department of Health and Human Services (HHS) Department of the Interior (DOI) Department of Justice (DOJ) Department of Transportation (DOT) Environmental Protection Agency (EPA) General Services Administration (GSA) National Aeronautics and Space Administration (NASA) Tennessee Valley Authority (TVA) Veterans Administration (VA)

As agreed with the Chairman's office, we limited the number of non-DOD federal agencies included in our review to these 12 agencies and 4 others--Departments of Commerce (DOC), Housing and Urban Development (HUD), and the Treasury and the U.S. Postal Service (USPS)--that had previously notified EPA of hazardous waste activities. These 16 non-DOD federal agencies are collectively referred to in this report as the federal agencies.

To determine whether the federal agencies had identified other potential abandoned or uncontrolled hazardous waste site locations not listed in ERRIS, we reviewed records and interviewed EPA and other federal agency officials at their headquarters, regional offices, and field locations and requested information from them on the ERRIS locations and others that may exist. Through additional discussions with these officials and review of EPA and agency records and files, we identified other potential locations. We also compared ERRIS location names with the assigned identification numbers.

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In our attempts to identify the known universe of locations, certain difficulties arose. For example, DOI listed as potential sites 26 former DOD locations now owned by DOI where live ordnance (explosive materials) was suspected. Although such situations, if true, would be hazardous, EPA regional office officials had varied opinions as to whether such instances should be considered potential hazardous waste sites. Because there did not appear to

⁵Although the Corps of Engineers is part of the U.S. Department of the Army, we have included it as a non-DOD federal agency because of the civil works functions it performs, such as building and maintaining water projects for civilian flood control and navigation purposes.

Operations Office, which considered the requirement as a one-time effort.

A DOE official from the Pittsburgh Naval Reactors Office stated that the guidance was transmitted to field offices and prime contractors and it required them to identify any sites. This effort resulted in one inactive site being identified and reported to DOE headquarters. DOE'S Oak Ridge and Savannah River Offices identified five locations with multiple potential sites. Their identification efforts included record searches, interviews with past and current employees, walking the property, and in some instances aerial photography and limited sampling. The requirement was viewed as an on-going process by both offices. A Savannah River official noted that his office has updated its efforts annually.

The DOE field offices in EPA Regions IX and X were aware of the 103(c) notification requirement and sites were reported to DOE headquarters. In addition, two of the field offices were still searching for sites and will report any that are identified to EPA. The DOE officials viewed the requirement as a continuing identification effort.

Other efforts

Beginning in 1983, DOE increased its attention to identifying potential sites at DOE facilities. For example, on May 11, 1983, DOE'S Assistant Secretary for Environmental Protection, Safety, and Emergency Preparedness requested that DOE's field organizations submit data to DOE headquarters on inactive waste sites that contain hazardous waste specifically listed under RCRA. Based on the information submitted, DOE compiled an October 1983 inventory of inactive waste sites to be updated periodically. Furthermore, the Assistant Secretary in a December 1, 1983, memorandum to DOE's field organizations stated that DOE was developing a CERCLA assurance program and urged all field organizations to continue CERCLA efforts to identify, locate, and manage inactive hazardous waste sites and to give those efforts priority attention. Interim DOE guidance on the CERCLA program indicated that site identification was a key activity, requiring the documentation of past chemical waste generation and disposal activities at all current DOE sites. The documentation would include a review of all past chemical waste management records. To document the existence or nonexistence of waste sites or areas of potential concern, DOE would use a number of methods, including reports, process information, production data, and interviews.

In addition, on December 30, 1983, the Secretary of DOE in his report to the President on DOE's system of internal accounting and administrative control highlighted that documented assurance was not readily available to confirm that all potential environmental problems have been identified and that proper mitigating measures have been taken. Under the category of corrective plans, the Secretary stated that

priority" compared to the listed sites. 42 U.S.C. 9611(e)(3). We therefore question the wording of the report, and suggest that care be taken to assure that the EPA officials mentioned do in fact "recognize" the statement which is attributed to them.

[GAO Comment: EPA, in its comments on a draft of this report (see app. VI), did not dispute this statement. Also, the statement does not refer to the use of CERCLA funds. The statement has been revised in the final report to read "EPA's Assistant Administrators for External Affairs and Solid Waste and Emergency Response recognized that EPA had placed a low priority on federal agencies and their CERCLA activities."]

At page 33 of the draft report, an unnamed "DOJ official in EPA Region IX" is cited as stating that limited resources are a problem in obtaining "action" at federal facilities. Suits involving alleged misdeeds of federal agencies under environmental laws almost always are centrally managed and defended by attorneys of the Environmental Defense Section of the Department's Land and Natural Resources Division, located in Washington, D.C., which does not have a field office in Region IX of EPA. The Environmental Defense Section has committed substantial new resources to CERCLA implementation and is meeting the Department's obligations under the Act. Since the report does not specify whose resources are the subject of discussion, we can only presume that the comment relates to resources other than the Department's litigation resources.

[GAO Comment: The "action" referred to in the report relates to additional action, such as assessment, evaluation, and/or corrective action, needed at the federal agency locations, not litigative action by DOJ's Environmental Defense Section of the Land and Natural Resources Division.

Finally, Appendix I, page 45 probably should mention an additional development in Department of Energy (DOE) compliance with the Resource Conservation and Recovery Act (RCRA). A judgment filed April 13, 1984, in litigation involving DOE's Y-12 facility at Oak Ridge, Tennessee, has clarified the application of RCRA to hazardous wastes associated with nuclear weapons facilities operated under the Atomic Energy Act. DOE is in the process of complying with that decision at the Y-12 facility and applying the principles of that judgment to other similar facilities. The process will require identification of the hazardous waste disposal, storage and treatment sites at such facilities.

[GAO Comment: This report relates to uncontrolled hazardous waste site locations. Therefore, it would be inappropriate to refer to the RCRA judgment, which relates to current and future control of hazardous waste.]