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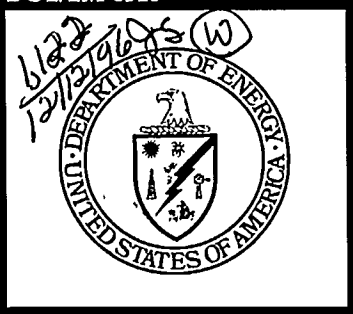

U.S. Department of Energy

Annual Report of Waste Generation and Pollution Prevention Progress 1994

September 1996

Office of Environmental Management
Washington, D.C.

DISCLAIMER

Preface

DOE/EM--0310

Department of Energy
Washington, DC 20585

This Report summarizes the waste generation and pollution prevention activities of the major operational sites in the Department of Energy (DOE).

We are witnessing progress in waste reduction from routine operations that are the focus of Department-wide reduction goals set by the Secretary on May 3, 1996. The goals require that by the end of 1999, we reduce, recycle, reuse, and otherwise avoid waste generation to achieve a 50 percent reduction over 1993 levels.

This Report provides the first measure of our progress in waste reduction and recycling against our 1993 waste generation baseline. While we see progress in reducing waste from our normal operations, we must begin to focus attention on waste generated by cleanup and facilities stabilization activities that are the major functions of the Office of Environmental Management.

Reducing the generation of waste is one of the seven principles that I have established for the *Office of Environmental Management Ten Year Plan*. As part of our vision to complete a major portion of the environmental cleanup at DOE sites over the next ten years, we must utilize the potential of the pollution prevention program to reduce the cost of our cleanup program. We have included the Secretarial goals as part of the performance measures for the Ten Year Plan, and we are committed to implementing pollution prevention ideas.

Through the efforts of both Federal and contractor employees, our pollution prevention program has reduced waste and the cost of our operations. I applaud their efforts and look forward to reporting further waste reduction progress in the next annual update of this Report.

Sincerely,

Alvin L. Alm

MASTER

Alvin L. Alm
Assistant Secretary for Environmental Management

At A Glance

This third Annual Report presents and analyzes 1994 DOE complex-wide waste generation and pollution prevention activities at 39 reporting sites in 26 States, and trends waste generation from 1991 through 1994. A 50 percent reduction goal (relative to the 1993 baseline) has been established for routine operations radioactive and hazardous waste generation, due by December 31, 1999. Overall, routine operations waste generation decreased nine percent from 1993 to 1994.

DOE Complex-Wide Waste Generation

- In 1994, a total of 251,413 cubic meters of waste was generated:
  - 78,638 cubic meters of radioactive waste[1] (31 percent)
  - 15,877 cubic meters of mixed waste[1] (six percent)
  - 30,349 metric tons* of hazardous waste (12 percent)
  - 126,549 metric tons* of sanitary waste (50 percent).

- Excluding sanitary waste and wastewater:
  - Routine operations waste decreased nine percent and cleanup/stabilization waste decreased 46 percent from 1993 to 1994.
  - Cleanup/stabilization waste volume (74,967 cubic meters) was approximately 50 percent greater than routine operations waste volume (49,897 cubic meters).
  - High-level waste was generated by routine operations only.
  - Transuranic waste was generated primarily by routine operations.
  - Low-level radioactive[1], low-level mixed[1], and hazardous waste were generated primarily by cleanup/stabilization activities.
  - Low-level radioactive waste[1] was the largest waste type generated, accounting for 60 percent of the routine operations waste generated, and approximately 61 percent of the cleanup/stabilization waste generated.

Waste Generation by Program

- Approximately 42 percent of the waste generated by the DOE complex was produced by Environmental Management program activities, and 40 percent was produced by Defense Programs activities.
- The Environmental Management program was the largest generator of routine operations and cleanup/stabilization waste.
- Defense Programs generated the largest amounts of high-level, transuranic, and sanitary waste. The Environmental Management program generated the largest amounts of low-level radioactive[1] and low-level mixed[1] waste.

Waste Generation by Site

- The Savannah River Site in South Carolina generated the largest high-level waste volume (1,764 cubic meters) and the largest transuranic waste volume (308 cubic meters).
- The Fernald Environmental Management Project in Ohio generated the largest low-level radioactive waste volume (30,632 cubic meters[1]).
- The Oak Ridge K-25 Site in Tennessee generated the largest low-level mixed waste volume (7,081 cubic meters).
- The Bonneville Power Administration in Oregon generated the largest hazardous waste amount (9,033 metric tons*).
- The Oak Ridge Y-12 Plant in Tennessee generated the largest sanitary waste amount (21,367 metric tons*).

Pollution Prevention/Recycling

- 56,277 metric tons* of materials were recycled in 1994. Approximately 69 percent of all recycling within the DOE complex was contributed by the States of Washington (26 percent), Ohio (15 percent), Illinois (11 percent), Tennessee (nine percent), and California (eight percent). ■

[1] *Excludes 11e(2) byproduct material (soil or other material contaminated by extraction or concentration of uranium or thorium). The only site reporting byproduct material in 1994 was the Weldon Spring Site Remedial Action Project.*

**Assuming one cubic meter is equivalent to one metric ton.*

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Chapter 1.0 INTRODUCTION

1.1 Pollution Prevention Program Goals and Mission

On May 3, 1996, the Secretary of Energy issued a policy memorandum to all Departmental Elements establishing waste reduction goals for accomplishment by December 31, 1999, using calendar year 1993 as the baseline year. Progress toward achieving these goals will be reported annually to the Secretary of Energy. It is the responsibility of each Federal and DOE contractor employee to work diligently to meet these goals, to aggressively seek ways to reduce the amount of pollutants generated within the workplace, and to conserve, reuse, and recycle resources.

Table 1.1 presents the waste reduction goals established by the Secretary of Energy in the *Pollution Prevention Program Plan 1996* (DOE/S-0118). This Plan, issued in May 1996, serves as the principal crosscutting guidance to all DOE Headquarters and field personnel, including Operations Offices, laboratories, and contractor personnel, to fully implement pollution prevention programs within the DOE complex by the year 2000.

The mission of DOE's Pollution Prevention Program is to reduce the generation and release of DOE multi-media wastes and pollutants by implementing cost-effective pollution prevention techniques, practices, and policies, while conducting DOE operations in compliance with applicable environmental regulations. Pollution Prevention is also required by various Federal laws and Executive Orders, including but not limited to the Pollution Prevention Act of 1990, the Resource Conservation and Recovery Act (RCRA), the Emergency Planning and Community Right-to-Know Act (EPCRA), Executive Order 12856, and Executive Order 12873.

1.2 Purpose

In 1994, DOE published its first annual report on waste generation and waste minimization activities performed across the DOE complex, the *Annual Report on Waste Generation and Waste Minimization Progress, 1991-1992*. In the current *Annual Report of Waste Generation and Pollution Prevention Progress 1994*, DOE measures the success of its pollution prevention strategies by documenting, tracking, and trending generation and pollution prevention activities throughout the DOE complex, including examples of site performance and waste management savings for each type of DOE waste. Progress in meeting waste reduction goals is measured against the *Annual Report on Waste Generation and Waste Minimization Progress 1993*, the "baseline" year.

The *Annual Report of Waste Generation and Pollution Prevention Progress 1994* is intended to be used as a management tool by DOE managers to determine sites and locations where waste generation is

Table 1.1 1999 Waste Reduction Goals

For Routine Operations:

- Reduce radioactive waste generation by 50 percent.
- Reduce mixed low-level waste generation by 50 percent.
- Reduce hazardous waste generation by 50 percent.
- Reduce sanitary waste generation by 33 percent.
- Reduce total releases and offsite transfers for treatment and disposal of toxic chemicals by 50 percent.

For All Operations, Including Cleanup/ Stabilization Activities:

- Recycle 33 percent of all sanitary waste.

For Affirmative Procurement:

- Increase procurement of Environmental Protection Agency-designated recycled products to 100 percent, except when items are not commercially available competitively at a reasonable price, or do not meet performance standards.

occurring, the volumes of each waste type, the sources of waste generation, and the nature of pollution prevention activities underway within the DOE complex. This knowledge will be used to assess progress and refine program activities to optimize waste reduction and pollution prevention results.

As DOE has changed its focus from weapons production to environmental cleanup, an increase in waste generation may be misinterpreted as undesirable when it may actually be an improvement (i.e., cleanup generates waste). When possible in this Report, a direct relationship between waste generation and specific pollution prevention activities has been identified to enable accurate evaluation of pollution prevention efforts.

1.3 Scope

Data were collected on wastes generated in 1994, and pollution prevention activities and progress through 1994. Secondary wastes generated in 1994 as a result of characterizing, treating, packaging, storing, disposing, or otherwise managing the existing inventory of wastes are also included. The data in this Report are presented for calendar years rather than fiscal years. For the waste types reported, it is assumed that one cubic meter is equivalent to one metric ton (±10 percent). Numeric values have been rounded to the nearest whole number, and if a total is less than one-half cubic meter or metric ton, it is shown as *less than 0.5* (<0.5). Process wastewater data was an optional reporting item in 1994; therefore, any process wastewater data submitted are provided in Appendix B, and are not included in the data totals or text of this Report. This Report does not address classified wastes, spent fuel, 11e(2) byproduct material, or wastes generated by Naval Reactors Facilities and Naval Shipyards.

Data provided in this Report are organized by waste category, waste type, program, operations office, State, and by individual reporting site. This Report presents all waste types generated by the DOE complex, identifies cost and resource savings, waste generation trends, and highlights representative pollution prevention accomplishments.

The transuranic waste type category includes mixed transuranic waste, and the low-level mixed waste type category includes mixed Toxic Substances Control Act regulated hazardous waste. The hazardous waste type category includes Resource Conservation and Recovery Act regulated hazardous waste, State regulated hazardous waste, and Toxic Substances Control Act regulated hazardous waste. For 1994, specification of a source for sanitary waste data was optional; therefore, sanitary waste data is listed in this Report as a combination of routine operations and cleanup/stabilization, unless otherwise noted. In the future, DOE plans to categorize and present the source of all waste types as either routine operations or cleanup/stabilization.

Figure 1.1 The 39 DOE Reporting Sites for 1994

1.4 *Methodology*

To efficiently collect and organize information from the reporting sites, an electronic reporting system was used. This system allowed the reporting sites to submit waste generation data and narrative text on computer diskette. All of the diskettes submitted were combined into a master set of data bases which were used to prepare this Report.

The *Waste Minimization Reporting System (WMINRS)* software and the support system developed around it combined to produce accuracy and consistency in the data obtained for this Report. Data validation was given a high priority, and a series of checks and cross-checks were implemented to validate the data received from the reporting sites. The 1994 data were compared against data reported for 1993, and were then compared against prior year data and other data sources, including the *Integrated Data Base Report–1994* and the *Mixed Waste Inventory Report*. Any resulting questions were resolved by the individual reporting site or its operations office.

1.5 *Changes Since the 1993 Report*

For 1994, the title of the report, the *Annual Report on Waste Generation and Waste Minimization Progress*, was revised to the *Annual Report of Waste Generation and Pollution Prevention Progress.*

As changes in waste generation occurred at individual sites within the DOE complex, the number of sites meeting the reporting threshold criteria identified in Table 1.2 also changed. In 1994, the total number of reporting sites decreased from 55 to 39 (see Figure 1.1 for reporting site locations). Fifteen sites that reported in 1993 did not meet the threshold for reporting in 1994, and one site, the Idaho Chemical Processing Plant, reported in combination with the Idaho National Engineering Laboratory rather than as an individual site (Table 1.3).

To reduce the burden of small sites having to report minor quantities of waste, the threshold reporting requirements for hazardous and sanitary waste were changed in 1994 (Table 1.2). For 1994, if a site generated more than 10 metric tons of Resource Conservation and Recovery Act regulated hazardous waste or Toxic Substances Control Act regulated hazardous waste annually, the site was required to report all of its waste generation. In 1993, if a site generated more than one metric ton of hazardous waste per month, it was required to report all of its waste generation. For 1994, if a site only generated sanitary waste, then it did not report. In 1993, if a site had over 100 employees and it generated sanitary waste, the site was required to report all of its waste generation.

Table 1.2 1994 Threshold Reporting Requirement Criteria on an Annual Basis

A site must report waste generation and waste minimization data/information if the site generated any regulated waste **and** one or more of the following criteria are met:

- Generated more than 50 cubic meters of low-level radioactive waste.
- Generated greater than one cubic meter of mixed waste (hazardous and radioactive).
- Generated more than 10 metric tons of Resource Conservation and Recovery Act regulated hazardous waste.
- Generated more than 10 metric tons of Toxic Substances Control Act regulated hazardous waste.

Changes in operations office designations and reporting site organization occurred in 1994. The Fernald Operations Office was renamed the Ohio Operations Office. Two reporting sites changed their operations office: the Mound Plant was reassigned to the Ohio Operations Office from the Albuquerque Operations Office, and the West Valley Demonstration Project was reassigned to the Ohio Operations Office from the Idaho Operations Office.

Three sites modified their names in 1994: the Pacific Northwest Laboratory became the Pacific Northwest National Laboratory, the Lawrence Berkeley Laboratory became the Lawrence Berkeley National Laboratory, and the Pittsburgh Energy Technology Center (PETC) Component Development & Integration Facility became the Western Environmental Technology Office.

Table 1.3 1993 Reporting Sites That Did Not Report in 1994

Operations Office	*Sites*
Headquarters	– Continuous Electron Beam Accelerator Facility* – Morgantown Energy Technology Center – Naval Oil Shale Reserve No. 3 – Naval Petroleum Reserve No. 1 – Naval Petroleum Reserve No. 3 – Office of Scientific and Technical Information – Southwestern Power Administration – Strategic Petroleum Reserve Office – Yucca Mountain Site Characterization Project
Albuquerque	– Grand Junction Projects Office – Waste Isolation Pilot Plant
Chicago	– RMI Decommissioning Project
Idaho	– Idaho Chemical Processing Plant **
Oak Ridge	– Oak Ridge Institute for Science and Education – Superconducting Super Collider Laboratory
Rocky Flats	– Oxnard Facility

* *In May 1996, renamed the Thomas Jefferson National Accelerator Facility.*

** *In 1994, the Idaho Chemical Processing Plant reported in combination with the Idaho National Engineering Laboratory rather than as a separate reporting site.*

The Office of Environmental Management (EM) was reorganized on December 12, 1995, and the Waste Minimization Division, EM-334, became the Office of Pollution Prevention, EM-77, reporting to the Deputy Assistant Secretary for Site Operations. The new organization allows increased attention to crosscutting functions that affect many programs across the DOE complex, such as pollution prevention. The Office of Pollution Prevention has an agency-wide responsibility to lead, plan, coordinate, and implement DOE's waste minimization and pollution prevention program.

1.6 Report Structure

This Report is organized into five chapters and six appendices. Chapter 1.0 introduces the content and format of the Report and the criteria for site reporting. Chapter 2.0 presents DOE's routine operations and cleanup/stabilization waste generation activities. In Chapter 3.0, waste generation is presented by DOE program. A summary of waste generation and pollution prevention activities for each operations office is provided in Chapter 4.0. Chapter 5.0 presents DOE waste generation for each State and pollution prevention activities at each reporting site.

The appendices present information in support of the data and discussions in this Report. Appendix A provides a complete list of DOE reporting and non-reporting sites. Appendix B provides DOE complex-wide data statistics, process wastewater data, and includes changes in data previously reported for 1991, 1992, and 1993. Appendix C provides *Toxics Release Inventory* (TRI) data for DOE sites, Appendix D provides a glossary of terms, Appendix E reprints the Resource Conservation and Recovery Act Agency Summary Report for Fiscal Year 1995, and Appendix F is an index organized by reporting site. ■

Chapter 2.0

WASTE GENERATION ACTIVITIES

This Chapter examines the specific waste categories and waste types within the DOE complex. DOE operations involve numerous processes and products that generate many wastes. The resulting wastes may be categorized as routine operations, cleanup/stabilization, or sanitary.

2.1 *DOE Complex-Wide Waste Generation*

The DOE complex is a collection of facilities that perform specific missions and objectives. Past operations have contributed to the contamination of facilities, soils, sediments, surface water, and groundwater at many sites. Accordingly, different activities produce different types of waste. Each waste has its own specific characteristics, potential environmental risks, and unique treatment, storage, and disposal facility requirements.

Figure 2.1 compares 1994 complex-wide waste generation against the 1993 baseline. Figure 2.2 illustrates waste generation by waste type and waste category. Table 2.1 identifies reporting sites by waste type and waste category.

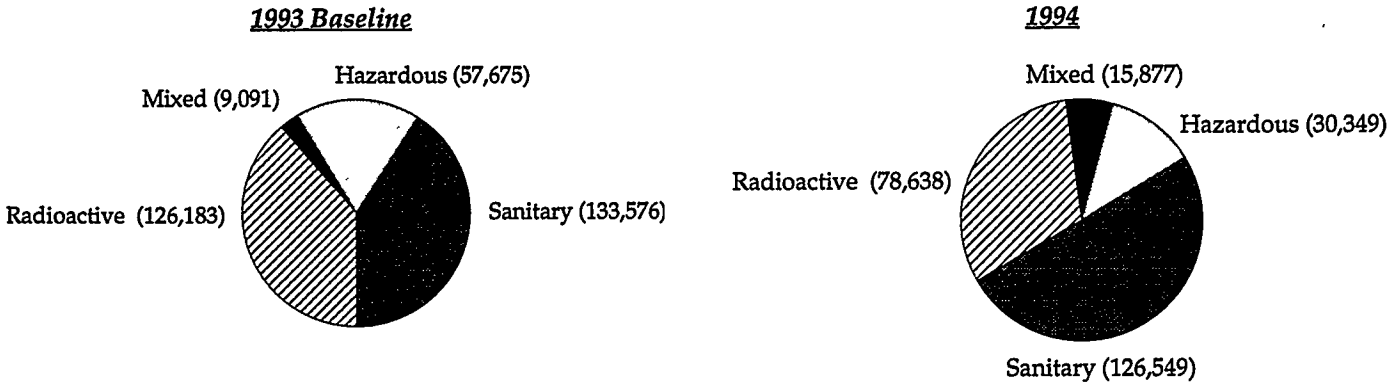
2.2 *Routine Operations Waste Generation*

Routine operations waste consists of normal operations waste produced by any type of production operation; analytical and/or research and development laboratory operations; treatment, storage, and disposal operations; "work for others;" or any other periodic or recurring work that is considered ongoing in nature. The term "normal operations" refers to the type of ongoing process (i.e., production, research and development, etc.), not to the specific activity that produced the waste. Periodic laboratory or facility cleanouts and spill cleanups which occur as a result of these processes are also considered normal operations.

The generation of routine operations waste decreased from 1991 to 1994 (Figure 2.3) by 24,508 cubic meters (33 percent). From 1993 to 1994, routine operations waste generation decreased by 5,063 cubic meters (nine percent). Routine operations wastes generated by the DOE complex include high-level, transuranic, low-level radioactive, low-level mixed, and hazardous. Figure 2.4 illustrates DOE complex-wide routine operations waste generation trends by waste type from 1991 through 1994.

As shown in Tables 2.2 and 2.3, the reporting sites produced 49,897 cubic meters of routine operations waste in 1994, which represents 20 percent of the total

Figure 2.1 Complex-Wide Waste Generation 1993 – 1994 (in Cubic Meters)*



Total Waste Generation 326,580 Cubic Meters

Total Waste Generation 251,413 Cubic Meters

** Assuming one cubic meter is equivalent to one metric ton.*

DOE waste generated. Low-level radioactive waste accounted for 29,920 cubic meters (60 percent) of the routine operations waste generated.

DOE has estimated the avoided cost of the reduced generation rate of routine operations waste from 1991 to 1994 to be $169 million (Table 2.4).

2.3 *Cleanup/Stabilization Waste Generation*

Cleanup/stabilization waste, including primary and secondary waste, is generated a single time by the environmental restoration of contaminated media (soil, groundwater, surface water, sediments, etc.); stabilization of nuclear and nonnuclear (chemical) materials; and deactivation and decommissioning of facilities. By definition, these activities are not considered to be periodic or ongoing because the waste is the direct result of past operations and activities, rather than the result of a current process. However, newly generated wastestreams that are produced during environmental restoration, stabilization, and decommissioning are considered secondary wastes, and must be minimized whenever possible. Secondary waste may result from activities such as handling, sampling, treatment, repackaging, and shipping, etc.

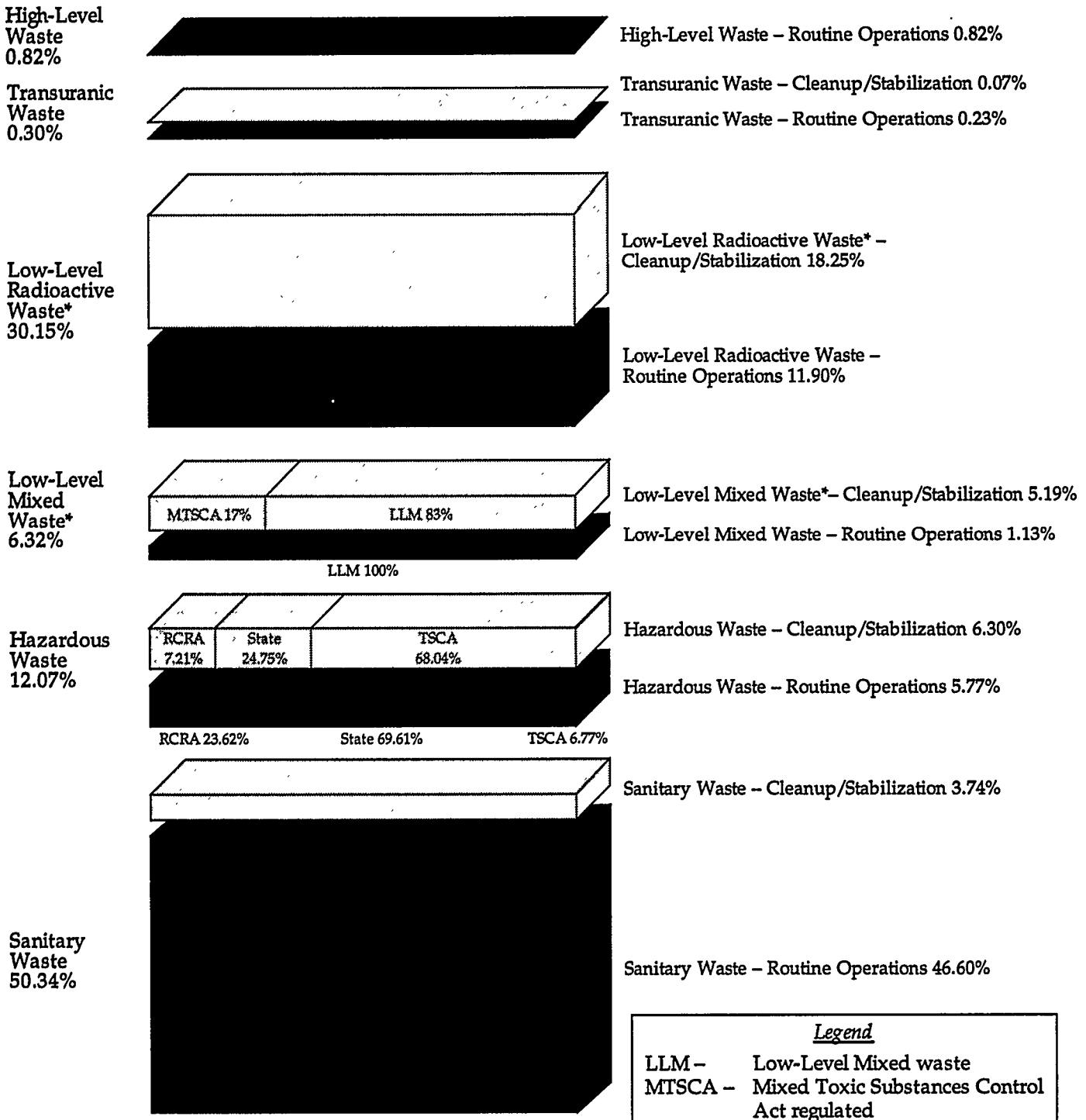
As shown in Table 2.2, the reporting sites generated 74,967 cubic meters of cleanup/stabilization waste in 1994 (excluding 11e(2) byproduct material), which represents 30 percent of the total DOE waste generated. **Cleanup/stabilization waste generation decreased 46 percent from 1993 to 1994, (Figure 2.5) with decreases in transuranic, low-level radioactive, low-level mixed, and hazardous waste.** Figure 2.6 illustrates DOE complex-wide cleanup/stabilization waste generation trends by waste type from 1991 through 1994.

2.4 *Sanitary Waste Generation*

Sanitary waste generated by the DOE complex is the result of housekeeping and construction activities. Table 2.2 shows that 126,549 metric tons of sanitary waste was generated in 1994, accounting for approximately 50 percent of the total DOE complex waste generation in 1994. Sanitary waste data were available for 34 of the 39 reporting sites, as some of the sites did not track or report sanitary waste totals.

Sanitary waste generation decreased approximately five percent from 1993 to 1994. For 1994, specification of a source for sanitary waste data was optional; therefore, sanitary waste data is listed in this Report as a combination of routine operations and cleanup/stabilization, unless otherwise noted. Major construction or demolition activities that occur from time-to-time throughout the DOE complex may influence sanitary waste generation volumes, and because of these variables, it is not possible to accurately trend sanitary waste data from 1991 to 1994 in this Report. ■

Figure 2.2 Total 1994 DOE Waste Generation by Routine Operations and Cleanup/Stabilization Waste Categories



Legend

LLM –	Low-Level Mixed waste
MTSCA –	Mixed Toxic Substances Control Act regulated
RCRA –	Resource Conservation and Recovery Act regulated
TSCA –	Toxic Substances Control Act regulated

* *Excludes 11e(2) byproduct material.*

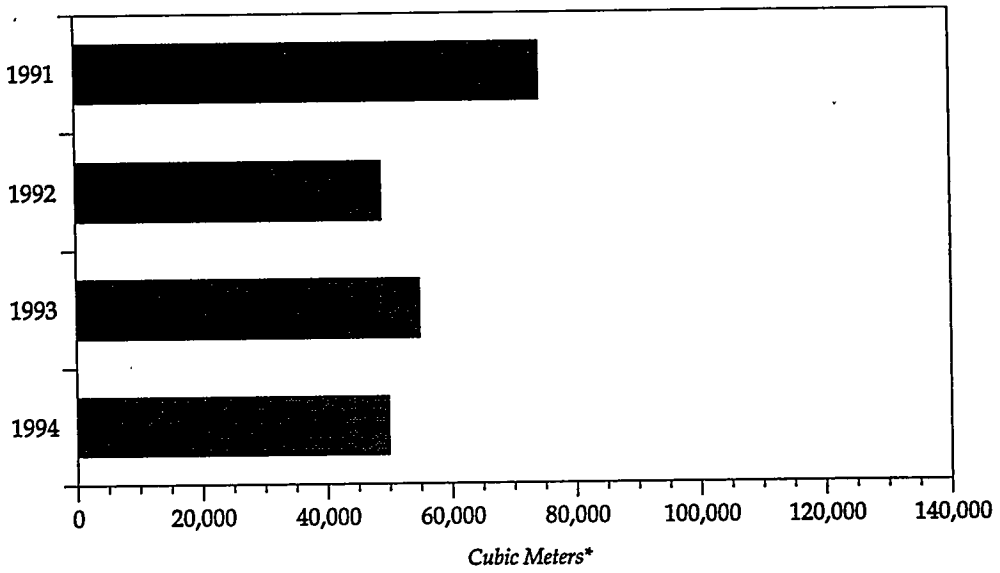
Table 2.1 Number of 1994 DOE Reporting Sites by Waste Category

Site Name	Routine Operations Waste					Cleanup/Stabilization Waste					Sanitary Waste	Process Wastewater
	HLW	TRU	LLR	LLM	Haz	HLW	TRU	LLR	LLM	Haz		
Ames Laboratory			✓		✓			✓				
Argonne National Laboratory-East		✓	✓	✓	✓			✓		✓	✓	
Argonne National Laboratory-West		✓	✓	✓	✓						✓	
Battelle Columbus Laboratories			✓					✓	✓			
Bonneville Power Administration					✓					✓	✓	
Brookhaven National Laboratory			✓	✓	✓			✓	✓	✓	✓	
Energy Technology Engineering Center					✓		✓	✓	✓	✓	✓	San
Fermi National Accelerator Laboratory			✓	✓	✓					✓	✓	
Fernald Environmental Management Project			✓	✓				✓	✓	✓	✓	LLR, San
Formerly Utilized Sites Remedial Action Program								✓	✓	✓	✓	
Hanford Site		✓	✓	✓	✓			✓	✓	✓	✓	LLM, San
Idaho National Engineering Laboratory	✓	✓	✓	✓	✓			✓	✓	✓	✓	LLR
Inhalation Toxicology Research Institute		✓	✓	✓	✓			✓			✓	
Kansas City Plant			✓		✓			✓		✓	✓	San
Lawrence Berkeley National Laboratory			✓	✓	✓			✓	✓	✓	✓	Haz
Lawrence Livermore National Laboratory		✓	✓	✓	✓			✓	✓	✓	✓	LLR, LLM, Haz
Los Alamos National Laboratory		✓	✓	✓	✓			✓	✓	✓	✓	LLR
Mound Plant			✓		✓						✓	LLR
Nevada Test Site				✓	✓			✓	✓	✓	✓	
North Las Vegas Facility					✓					✓	✓	
Oak Ridge K-25 Site			✓	✓				✓	✓		✓	LLM
Oak Ridge National Laboratory		✓	✓	✓	✓		✓	✓	✓	✓	✓	LLM, Haz, San
Oak Ridge Y-12 Plant			✓	✓				✓	✓		✓	LLR, LLM, San
Pacific Northwest National Laboratory		✓	✓	✓	✓							
Paducah Gaseous Diffusion Plant									✓	✓		
Pantex Plant			✓	✓	✓			✓		✓	✓	
Pinellas Plant			✓		✓					✓	✓	Haz, San
Pittsburgh Energy Technology Center					✓					✓	✓	
Portsmouth Gaseous Diffusion Plant								✓	✓		✓	
Princeton Plasma Physics Laboratory			✓	✓	✓					✓	✓	
Rocky Flats Environmental Technology Site		✓	✓	✓	✓		✓	✓	✓	✓	✓	
Sandia National Laboratories/California			✓	✓	✓			✓	✓	✓	✓	Haz
Sandia National Laboratories/New Mexico			✓	✓	✓			✓		✓	✓	
Savannah River Site	✓	✓	✓	✓	✓		✓	✓		✓	✓	
Stanford Linear Accelerator Center			✓		✓			✓		✓	✓	San
Weldon Spring Site Remedial Action Project									✓	✓	✓	
West Valley Demonstration Project			✓	✓	✓				✓	✓	✓	
Western Area Power Administration					✓					✓	✓	
Western Environmental Technology Office					✓					✓		San
Total Number of Sites Reporting Waste Generation	2	11	28	23	31	0	4	25	20	30	34	

Waste Type Key

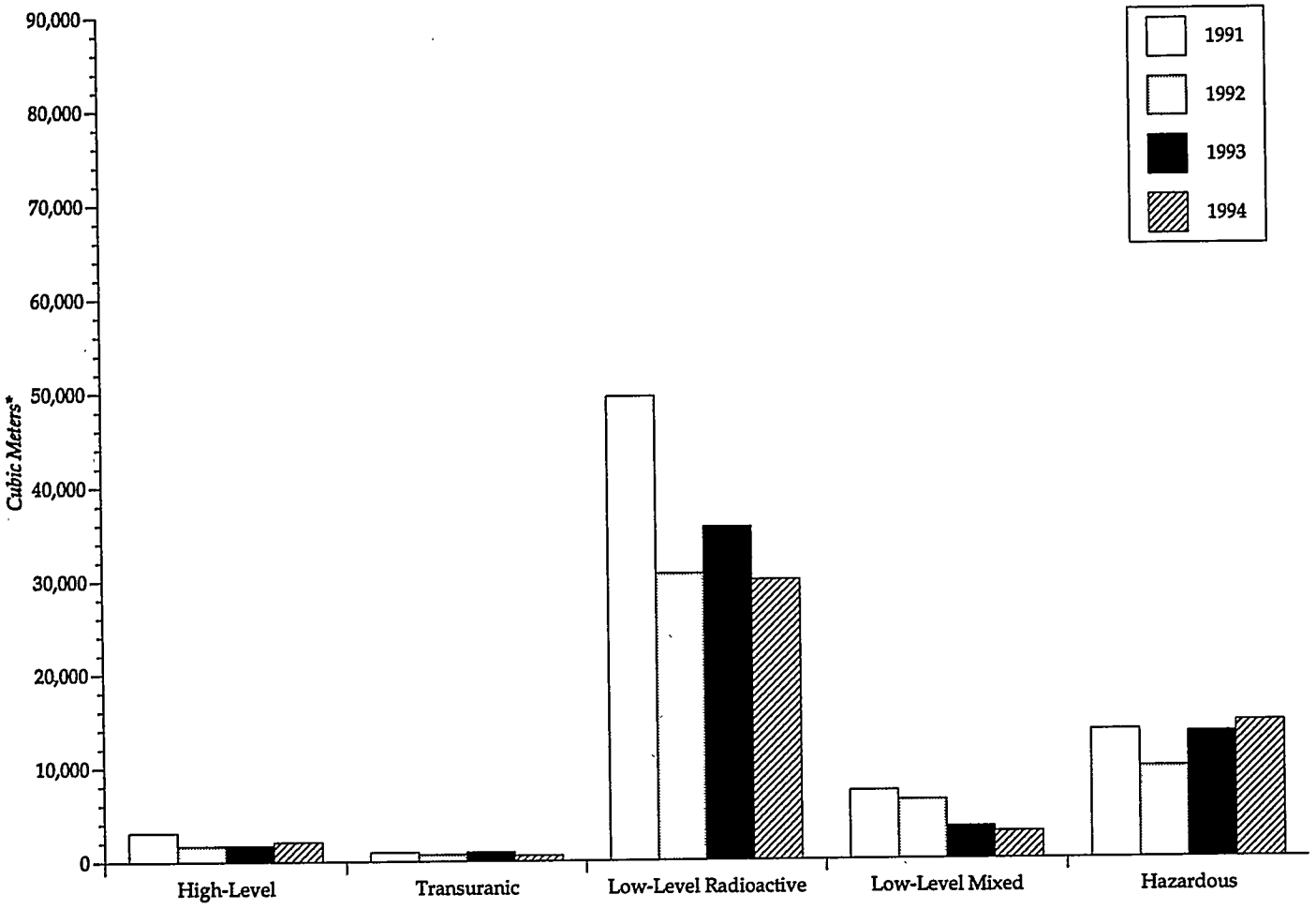
HLW = High-Level Waste
TRU = Transuranic
LLR = Low-Level Radioactive
LLM = Low-Level Mixed
Haz = Hazardous
San = Sanitary

Figure 2.3 DOE Complex-Wide Routine Operations Waste Generation 1991 – 1994



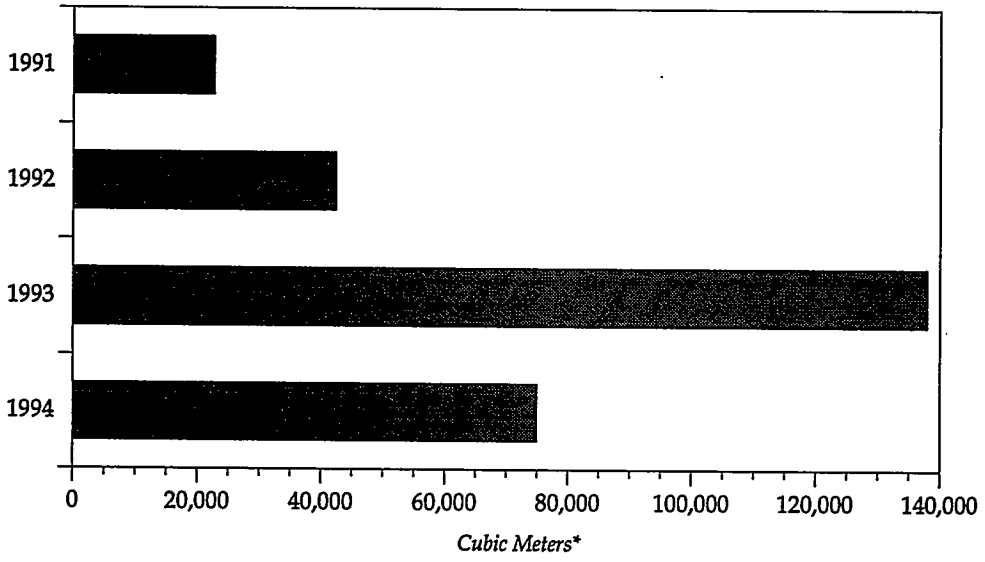
** Assuming one cubic meter is equivalent to one metric ton.*

Figure 2.4 DOE Complex-Wide Routine Operations Waste Type Generation Trend 1991 – 1994



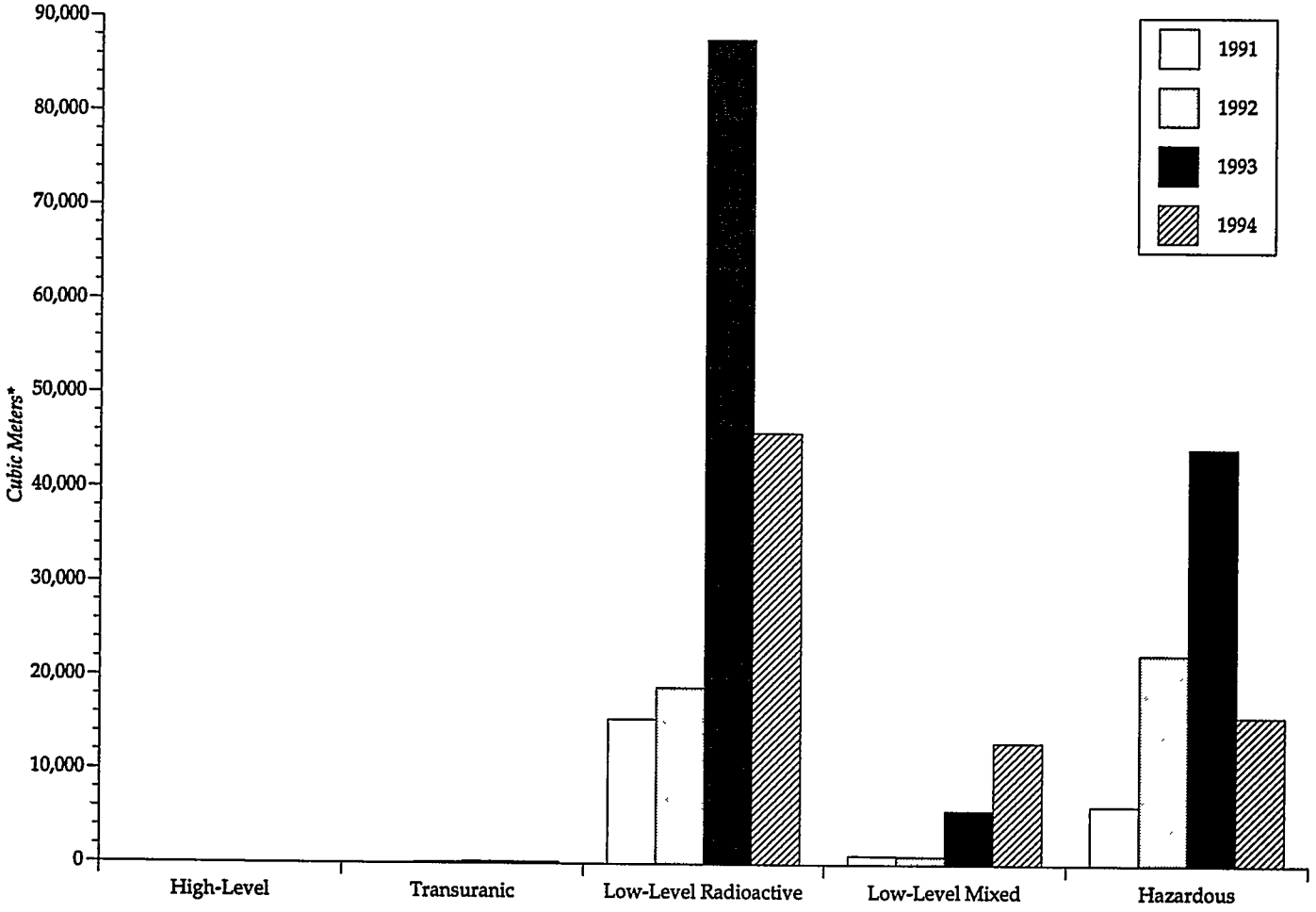
** Assuming one cubic meter is equivalent to one metric ton.*

Figure 2.5 DOE Complex-Wide Cleanup/Stabilization Waste Generation 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

Figure 2.6 DOE Complex-Wide Cleanup/Stabilization Waste Type Generation Trend 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

Table 2.2 1994 Total DOE Waste Generation
(in Cubic Meters)

Waste Type	Routine Operations Waste			Cleanup/Stabilization Waste			Total 1994 Waste Generation
	Liquid	Solid	Total	Liquid	Solid	Total	
High-Level	2,071	0	2,071	0	0	0	2,071
Transuranic	1	567	568	0	192	192	760
Low-Level Radioactive**	3,391	26,529	29,920	266	45,621	45,887	75,807
Low-Level Mixed**	1,131	1,706	2,837	8,179	4,861	13,040	15,877
Hazardous*	0	14,501	14,501	0	15,848	15,848	30,349
Sanitary*	–	–	–	–	–	–	126,549
TOTALS	*6,594*	*43,303*	*49,897*	*8,445*	*66,522*	*74,967*	*251,413*

* *Assuming one cubic meter is equivalent to one metric ton.*

** *Excludes 11e(2) byproduct material (cleanup/stabilization waste only), which is soil or other material contaminated by extraction or concentration of uranium or thorium.*

Table 2.3 Generation of Routine Operations Waste for 1991, 1992, 1993, and 1994
(in Cubic Meters)

Waste Type	1991** Generation	1992** Generation	1993 Generation	1994 Generation	Net Change from 1991 to 1994	Net Change from 1993 to 1994
High-Level	3,078	1,684	1,708	2,071	- 1,007	363
Transuranic	932	682	941	568	- 364	- 373
Low-Level Radioactive	49,499	30,630	35,577	29,920	- 19,579	- 5,657
Low-Level Mixed	7,275	6,244	3,380	2,837	- 4,438	- 543
Hazardous*	13,621	9,707	13,354	14,501	880	1,147
TOTALS	*74,405*	*48,947*	*54,960*	*49,897*	*- 24,508*	*- 5,063*

* *Assuming one cubic meter is equivalent to one metric ton.*

** *Adjusted to reflect only routine operations waste generation.*

Table 2.4 Cost Avoided from Reduced Routine Operations Waste Generation in 1994

Waste Type	Net Change from 1991 to 1994 (Cubic Meters)	Cost Per Cubic Meter*	Cost Avoided (Rounded to the nearest $100,000)
High-Level	- 1,007	$84,000	$ 84,600,000
Transuranic	- 364	$48,000	$ 17,500,000
Low-Level Radioactive	- 19,579	$ 1,300	$ 25,500,000
Low-Level Mixed	- 4,438	$11,000	$ 48,800,000
Hazardous	880	$ 8,400	($ 7,400,000)
TOTALS	*- 24,508*	*N/A*	*$169,000,000*

* *Radioactive waste costs are based upon Report INEL-94/0250 of variable costs (excluding fixed operating costs) from four representative sites. Nonradioactive waste costs are based on information from several sources compiled by the Office of Pollution Prevention. Actual costs could vary among sites.*

Chapter 3.0 WASTE GENERATION BY PROGRAM

This Chapter presents waste generation by program (Cognizant Secretarial Office) within the DOE complex in 1994. Because each program has a unique mission, the waste quantities and waste types generated and the actions being taken to reduce them vary.

In most instances, data for this Report have been gathered by the sites at the end of the generation process, when the waste is sent to storage, treatment, and/or final disposal. This "total" waste generation number includes all of the waste generated plus waste resulting from any operation at the site. To fulfill the requirements of this Report, the collected data were analyzed to determine the quantity of each waste type to be attributed to each of the programs at each reporting site (a site may attribute waste generated to more than one program).

There is a possibility that some wastes have been "double-counted," meaning that the same waste has been attributed to more than one DOE program in error. Double-counting may occur when the original waste is attributed to both the program that actually generated it, as well as to the waste management organization responsible for its treatment, repackaging, storage, or disposal. The amount of double-counting in the 1994 data has not been determined, but its impact on this Report is expected to be minimal.

The quantity and category of waste generated by each DOE program in 1994 is presented in Table 3.1. Figures 3.1 and 3.2 illustrate DOE complex-wide routine operations and cleanup/stabilization waste generation trends by program from 1991 through 1994. Figure 3.3 presents a series of bar charts illustrating 1994 waste generation by program and waste type.

As in previous years, Environmental Management and Defense Programs are the only programs that generated high-level waste. The Environmental Management program generated 75 percent of the total low-level radioactive waste volume in 1994 (excluding 11e(2) byproduct material), and generated the largest volume of low-level mixed waste (excluding 11e(2) byproduct material). Defense Programs, Energy Research, Power Marketing Administration, and the Environmental Management program generated more than 99 percent of the DOE complex hazardous waste total in 1994.

3.1 *Environmental Management*

DOE's Office of Environmental Management is responsible for managing waste and cleaning up contamination at DOE sites across the Nation. As DOE's largest program, Environmental Management must safely minimize, handle, treat, store, transport, and dispose of DOE waste while ensuring that risks to human health, safety, and the environment are

Table 3.1 1994 Total Routine Operations and Cleanup/Stabilization Waste Generation by Program and Waste Type
(in Cubic Meters)

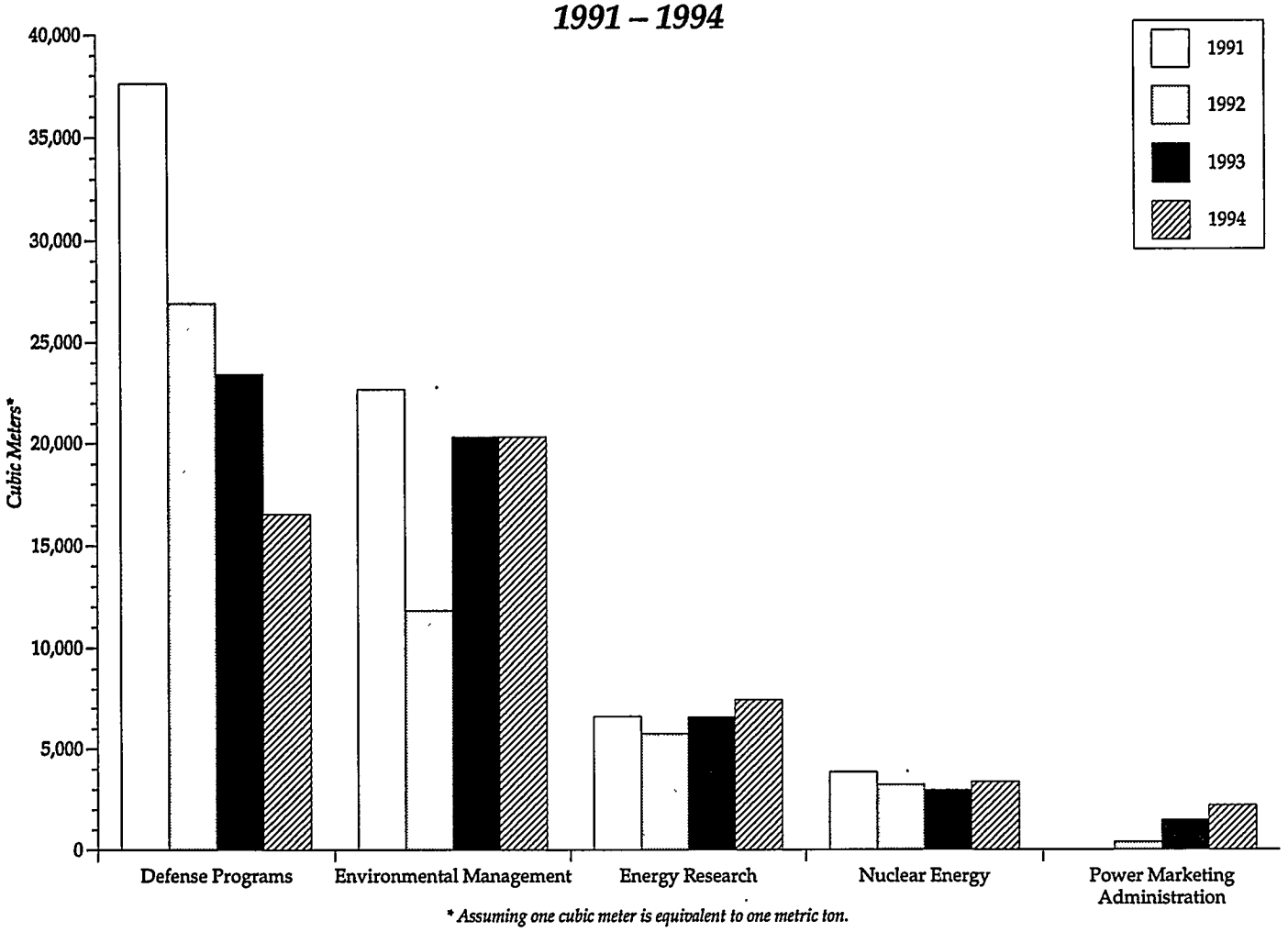
Program	*High-Level‡*	*Transuranic*		
	Total High-Level	*Routine Operations*	*Cleanup/ Stabilization*	*Total Transuranic*
Defense Programs	**1,727**	208	172	**380**
Energy Research	**0**	28	0	**28**
Environmental Management	**344**	311	20	**331**
Nuclear Energy	**0**	21	0	**21**
Power Marketing Administration	**0**	0	0	**0**
Others**	**0**	0	0	**0**
TOTALS	*2,071*	*568*	*192*	*760*

Program	*Low-Level Radioactive*			*Low-Level Mixed*		
	Routine Operations	*Cleanup/ Stabilization*	*Total Low-Level Radioactive*	*Routine Operations*	*Cleanup/ Stabilization*	*Total Low-Level Mixed*
Defense Programs	7,898	1,330	**9,228**	948	81	**1,029**
Energy Research	3,624	1,734	**5,358**	95	12	**107**
Environmental Management	15,455	41,398§	**56,853**	1,453	12,946§	**14,399**
Nuclear Energy	2,939	1,417	**4,356**	341	1	**342**
Power Marketing Administration	0	0	**0**	0	0	**0**
Others**	4	8	**12**	0	0	**0**
TOTALS	*29,920*	*45,887*	*75,807*	*2,837*	*13,040*	*15,877*

Program	*Hazardous**			*Total Sanitary**
	Routine Operations	*Cleanup/ Stabilization*	*Total Hazardous*	
Defense Programs	5,749	1,542	**7,291**	**82,097**
Energy Research	3,702	3,809	**7,511**	**9,069**
Environmental Management	2,745	3,064	**5,809**	**27,496**
Nuclear Energy	76	15	**91**	**1,170**
Power Marketing Administration	2,201	7,414	**9,615**	**6,618**
Others**	28	4	**32**	**99**
TOTALS	*14,501*	*15,848*	*30,349*	*126,549*

* *Assuming one cubic meter is equivalent to one metric ton.*
** *Others include the Office of Civilian Radioactive Waste Management, Energy Efficiency and Renewable Energy, Office of Fossil Energy, Chief Financial Officer, Human Resources and Administration, Office of Nonproliferation and National Security, and the Office of Science Education and Technical Information.*
‡ *Only routine operations waste is generated.*
§ *Excludes 11e(2) byproduct material (soil or other material contaminated by extraction or concentration of uranium or thorium).*

Figure 3.1 DOE Complex-Wide Routine Operations Waste Generation by Program 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

eliminated or reduced to meet Federal, State, and local laws and regulations. Environmental Management's responsibilities include environmental restoration, waste management, technology development, nuclear material and facility stabilization, and landlord support.

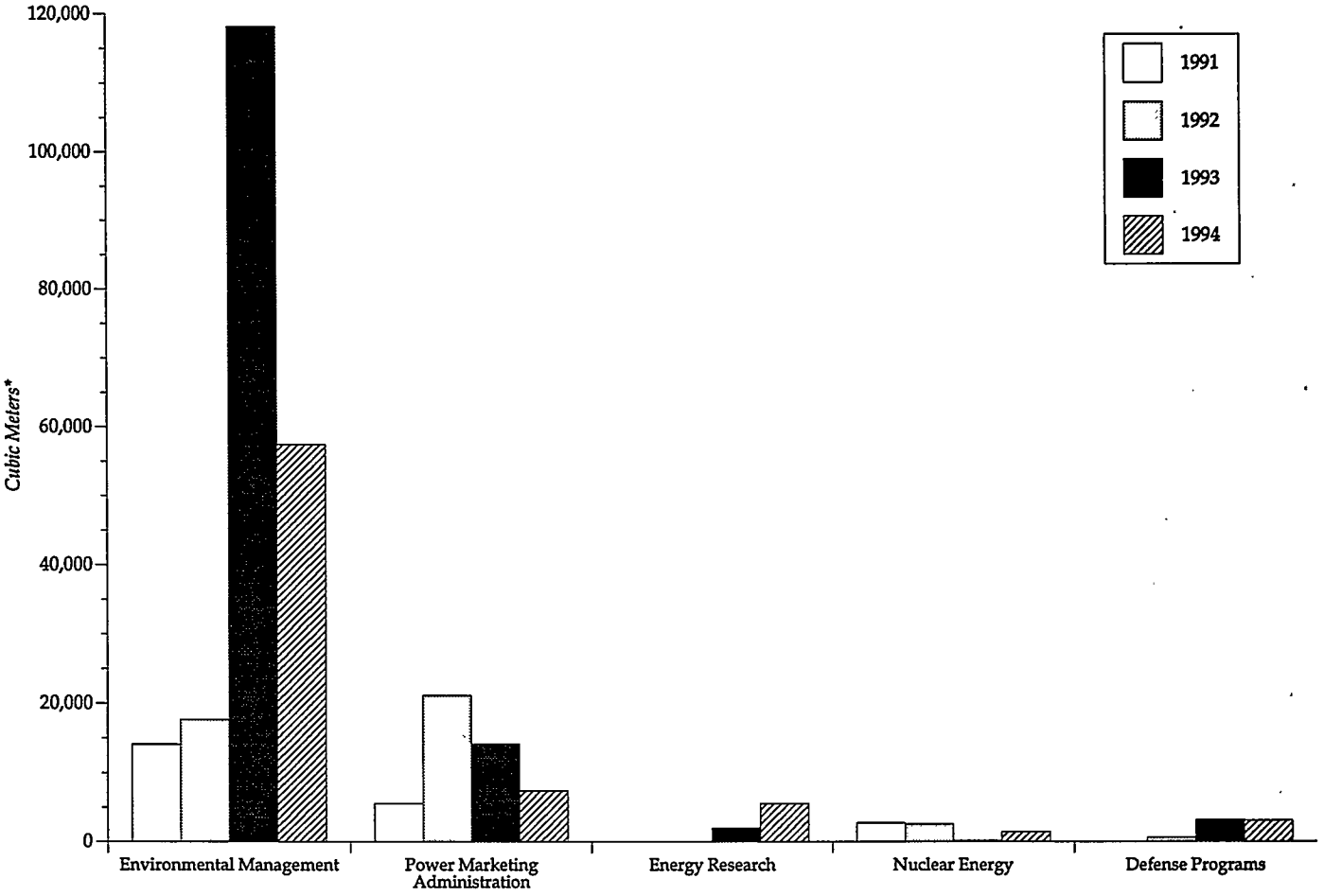
The Environmental Management program was the largest generator of low-level radioactive waste in 1994 (56,853 cubic meters). The Fernald Environmental Management Project contributed 54 percent of the low-level radioactive waste total due to decommissioning projects.

3.2 *Defense Programs*

The mission of Defense Programs is to ensure the safety, reliability, and performance of nuclear weapons without underground nuclear testing. Defense Programs supports the existing nuclear weapons stockpile, with a focus on administering the safety and security of existing weapons; research, development, and testing; weapons dismantlement; reconfiguration of the weapons complex; and effective management of nuclear materials. Defense Programs also pursues dual-use technology development, and facilitates technology transfer to the private sector as a means to improve our nation's economic future. Principal activities within Defense Programs include research and development of nuclear and nonnuclear weapons components, as well as disassembly of existing weapons stockpiles.

Defense Programs generated the greatest volume of high-level, transuranic, and sanitary waste in 1994 (1,727 cubic meters, 380 cubic meters, and 82,097 metric tons, respectively). The Savannah River Site generated the greatest volume of high-level and transuranic waste due to a cleanout and restart of the F-Canyon separation process. The Oak Ridge Y-12 Plant generated the greatest volume of sanitary waste due to building demolition activities.

Figure 3.2 DOE Complex-Wide Cleanup/Stabilization Waste Generation by Program 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

3.3 *Energy Research*

The mission of the Office of Energy Research is to perform basic research in energy-related areas, perform technological development and management of the High Energy and Nuclear Physics programs, and to conduct fundamental research in energy, matter, and the basic forces of nature.

In 1994, the Energy Research Program did not generate high-level waste, but generated relatively small quantities of transuranic, low-level radioactive, and low-level mixed waste. Because Energy Research operates a large percentage of the DOE facilities, it contributed approximately 25 percent of the total hazardous waste generated in the DOE complex in 1994. The Argonne National Laboratory–East generated the greatest volume of Toxic Substances Control Act regulated hazardous waste in 1994.

3.4 *Nuclear Energy*

The Office of Nuclear Energy, Science, and Technology is responsible for providing technical leadership to address critical domestic and international nuclear issues. The Office's efforts are directed toward increasing nuclear safety in the U.S. by contributing to energy supply diversity, competitiveness, and security. The Office of Nuclear Energy, Science, and Technology generated less than one percent of the DOE complex waste total in 1994 (excluding sanitary waste and waste generated by the Naval Nuclear Propulsion Program [NE-60]).

3.5 *Power Marketing Administration*

The Power Marketing Administration provides energy services and maintains electrical transmission facilities. Sites managed by the Power Marketing Administration include the Alaska Power Administration, Bonneville Power Administration,

Southeastern Power Administration, Southwestern Power Administration, and Western Area Power Administration. The Power Marketing Administration generated wastes during environmental restoration, maintenance, and replacement of equipment containing polychlorinated biphenyl insulator fluids. **The Power Marketing Administration was the largest generator of cleanup/ stabilization hazardous waste in 1994 (7,414 metric tons)**, primarily consisting of Toxic Substances Control Act regulated hazardous waste due to ongoing removal of polychlorinated biphenyl-contaminated fluids and equipment.

3.6 *Other Programs*

DOE programs that generated less than 110 cubic meters of waste in 1994 are categorized as "Other" programs. These programs include the Office of Fossil Energy, Energy Efficiency and Renewable Energy, the Office of Civilian Radioactive Waste Management, Chief Financial Officer, Human Resources and Administration, the Office of Nonproliferation and National Security, and the Office of Science Education and Technical Information. Of these programs, the Office of Fossil Energy and the Office of Civilian Radioactive Waste Management generated the greatest amounts of waste (109 metric tons and 12 cubic meters, respectively).

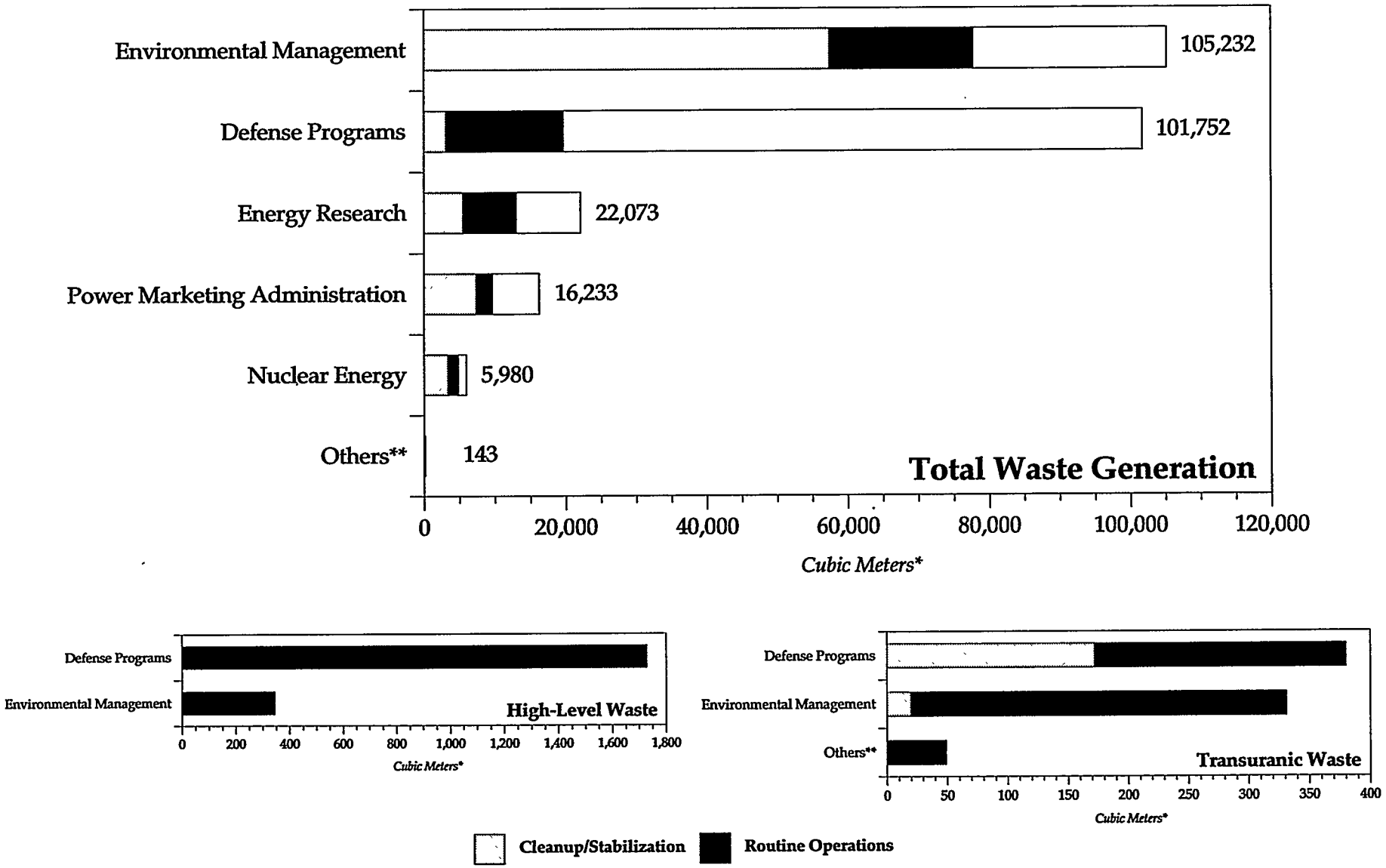
3.6.1 *Office of Fossil Energy*

The Office of Fossil Energy manages domestic fossil fuel programs related to the production and use of coal, natural gas, and oil. Fossil Energy Program sites are generally categorized as research and development, oil and gas production and exploration, or petroleum storage. The objective of the Fossil Energy Program is to provide a general technology and knowledge base for use by the private sector to complete development and initiate commercialization of advanced processes and energy systems. The Fossil Energy Program is principally executed through the Pittsburgh Energy Technology Center in Pennsylvania.

3.6.2 *Office of Civilian Radioactive Waste Management*

The Office of Civilian Radioactive Waste Management is responsible for developing and managing a Federal system for disposing of spent nuclear fuel and high-level radioactive waste. In 1994, a restructuring of the program defined two "business centers," the Yucca Mountain Site Characterization Project and the Waste Acceptance, Storage, and Transportation Project. A management center provides integration and management support to the Director and ongoing projects. ■

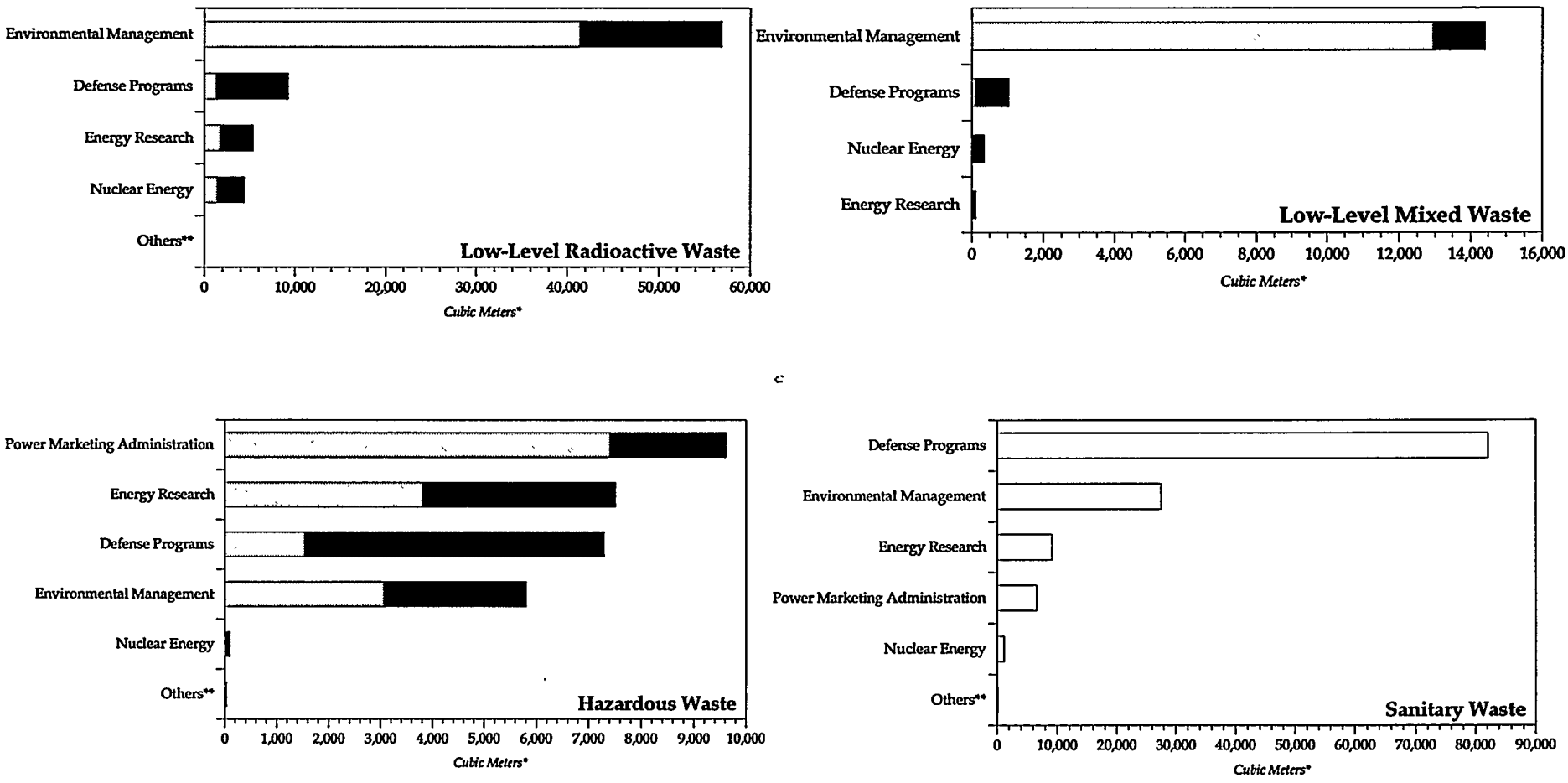
Figure 3.3 1994 Cleanup/Stabilization and Routine Operations Waste Generation by Program, Waste Category, and Waste Type



* *Assuming one cubic meter is equivalent to one metric ton.*

** *Others may include the Office of Civilian Radioactive Waste Management, Energy Efficiency and Renewable Energy, Office of Fossil Energy, Chief Financial Officer, Human Resources and Administration, Office of Nonproliferation and National Security, and the Office of Science Education and Technical Information.*

Figure 3.3 1994 Cleanup/Stabilization and Routine Operations Waste Generation by Program, Waste Category, and Waste Type (Continued)



* *Assuming one cubic meter is equivalent to one metric ton.*

** *Others may include the Office of Civilian Radioactive Waste Management, Energy Efficiency and Renewable Energy, Office of Fossil Energy, Chief Financial Officer, Human Resources and Administration, Office of Nonproliferation and National Security, and the Office of Science Education and Technical Information.*

Chapter 4.0

WASTE GENERATION BY OPERATIONS OFFICE

This Chapter presents waste generation by DOE operations offices and by the group of sites that report directly to DOE Headquarters. There are 10 operations offices within the DOE complex: Albuquerque, Chicago, Idaho, Nevada, Oakland, Oak Ridge, Ohio, Richland, Rocky Flats, and Savannah River. All 10 operations offices plus Headquarters oversee sites that reported radioactive and hazardous waste generation in 1994.

Table 4.1 lists the 1994 reporting sites managed by each operations office and the sites managed by Headquarters. Table 4.2 presents the quantities of each waste type generated by the Operations Offices and Headquarters in 1994.

Table 4.3 compares 1994 routine operations waste generation against the 1993 baseline. Figures 4.1 and 4.2 illustrate DOE complex-wide routine operations and cleanup/stabilization waste generation trends by operations office from 1991 through 1994. Figure 4.3 illustrates 1994 waste generation by operations office and Headquarters.

4.1 *Headquarters*

DOE Headquarters provides direction, policy, management, and coordination to assigned field elements. DOE Headquarters also provides the entire complex with policy, management systems, oversight, and support in the areas of energy and facilities management, effective and efficient systems acquisition, implementation of the contractor employee protection program, and execution of other field management programs.

The DOE Headquarters reporting sites have a variety of site-specific missions, including fossil energy programs, power marketing, research and development, production, and site characterization.

In 1994, DOE Headquarters reporting sites generated 9,623 metric tons of hazardous waste (32 percent of the DOE complex total), and 6,717 metric tons of sanitary waste (five percent of the DOE complex total). High-level, transuranic, low-level radioactive, and low-level mixed waste were not generated by Headquarters reporting sites in 1994.

Hazardous waste generation decreased from 15,827 metric tons in 1993 to 9,623 metric tons in 1994. Sanitary waste generation decreased from 8,568 metric tons in 1993 to 6,717 metric tons in 1994.

4.2 *Albuquerque Operations Office*

The Albuquerque Operations Office provides field level Federal management to assure effective, efficient, safe, and secure accomplishment of DOE's national defense, environmental quality, science and technology, technology transfer and

Table 4.1 DOE Operations Offices and Sites, 1994

Operations Office	*Sites*
Headquarters	– Bonneville Power Administration – Pittsburgh Energy Technology Center (PETC) – Western Area Power Administration – Western Environmental Technology Office
Albuquerque	– Inhalation Toxicology Research Institute – Kansas City Plant – Los Alamos National Laboratory – Pantex Plant – Pinellas Plant – Sandia National Laboratories/California – Sandia National Laboratories/New Mexico
Chicago	– Ames Laboratory – Argonne National Laboratory-East – Argonne National Laboratory-West – Battelle Columbus Laboratories[1] – Brookhaven National Laboratory – Fermi National Accelerator Laboratory – Princeton Plasma Physics Laboratory
Idaho	– Idaho National Engineering Laboratory
Nevada	– Nevada Test Site – North Las Vegas Facility
Oakland	– Energy Technology Engineering Center – Lawrence Berkeley National Laboratory – Lawrence Livermore National Laboratory – Stanford Linear Accelerator Center
Oak Ridge	– Formerly Utilized Sites Remedial Action Program – Oak Ridge K-25 Site – Oak Ridge National Laboratory – Oak Ridge Y-12 Plant – Paducah Gaseous Diffusion Plant – Portsmouth Gaseous Diffusion Plant – Weldon Spring Site Remedial Action Project
Ohio	– Fernald Environmental Management Project – Mound Plant[2] – West Valley Demonstration Project[3]
Richland	– Hanford Site – Pacific Northwest National Laboratory
Rocky Flats	– Rocky Flats Environmental Technology Site
Savannah River	– Savannah River Site

1 *Moved to the Ohio Operations Office as of January 1, 1996.*

2 *Moved from Albuquerque Operations Office as of October 1, 1994.*

3 *Moved from Idaho Operations Office as of October 1, 1994.*

Table 4.2 1994 Waste Generation by Operations Office and Waste Type (in Cubic Meters)

Operations Office	High-Level**	Transuranic			Low-Level Radioactive‡		
	Routine Operations	Routine Operations	Cleanup/ Stabilization	Total Transuranic	Routine Operations	Cleanup/ Stabilization	Total Low-Level Radioactive
Headquarters	0	0	0	0	0	0	0
Albuquerque	0	84	0	84	2,151	1,636	3,787
Chicago	0	7	0	7	2,135	2,699	4,834
Idaho	307	3	0	3	2,336	2,363	4,699
Nevada	0	0	0	0	0	89	89
Oakland	0	7	3	10	241	141	382
Oak Ridge	0	24	1	25	6,472	7,210	13,862
Ohio	0	0	0	0	4,788	30,049	34,837
Richland	0	299	0	299	4,486	218	4,704
Rocky Flats	0	8	16	24	461	78	539
Savannah River	1,764	136	172	308	6,850	1,404	8,254
TOTALS	*2,071*	*568*	*192*	*760*	*29,920*	*45,887*	*75,807*

Operations Office	Low-Level Mixed‡			Hazardous*			Total Sanitary*
	Routine Operations	Cleanup/ Stabilization	Total Low-Level Mixed	Routine Operations	Cleanup/ Stabilization	Total Hazardous	
Headquarters	0	0	0	2,207	7,416	9,623	6,717
Albuquerque	56	101	157	1,062	2,036	3,098	33,656
Chicago	370	17	387	2,605	3,735	6,340	4,552
Idaho	23	322	345	2,239	10	2,249	389
Nevada	1	31	32	4,464	866	5,330	14,602
Oakland	19	19	38	1,426	752	2,178	9,972
Oak Ridge	750	10,718	11,468	72	501	573	29,228
Ohio	6	81	87	46	7	53	8,538
Richland	596	1,738	2,334	294	419	713	9,156
Rocky Flats	275	13	288	9	50	59	2,732
Savannah River	741	0	741	77	56	133	7,007
TOTALS	*2,837*	*13,040*	*15,877*	*14,501*	*15,848*	*30,349*	*126,549*

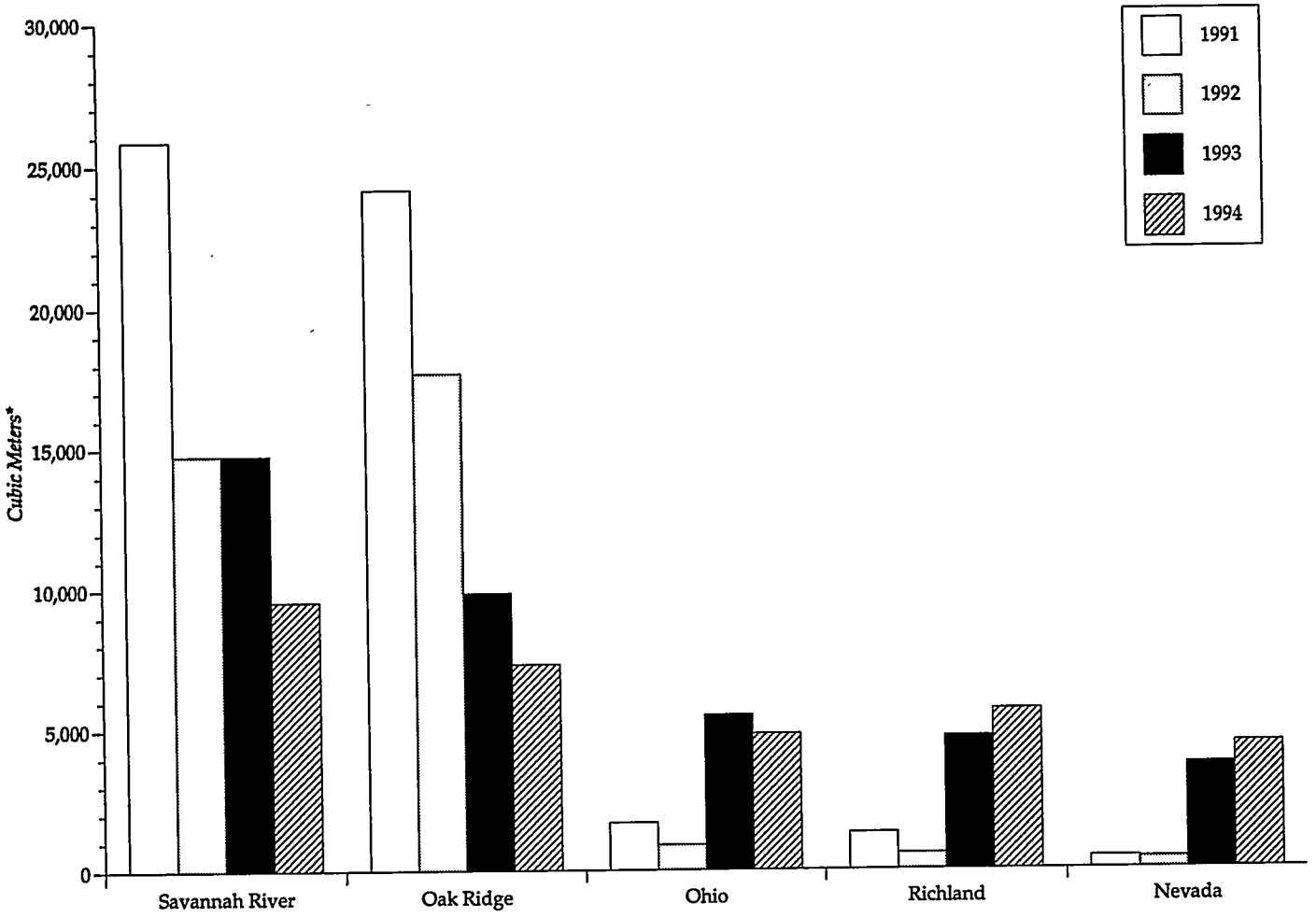
* *Assuming one cubic meter is equivalent to one metric ton.*
** *No cleanup/stabilization waste was generated in the high-level waste category.*
‡ *Excludes 11e(2) byproduct material (soil or other material contaminated by extraction or concentration of uranium or thorium).*

Table 4.3 1994 Routine Operations Waste Generation and the 1993 Baseline (in Cubic Meters)

Operation	State	Site Name	1993			1994			Percent Change
			Radioactive	Hazardous[1]	TOTAL	Radioactive	Hazardous[1]	TOTAL	
Albuquerque	CO	*Grand Junction Projects Office*[2]	*<0.5*	*1*	*1*	*n/a*	*n/a*	*n/a*	*n/a*
Albuquerque	NM	Inhalation Toxicology Research Institute	33	7	40	15	5	20	(50)
Albuquerque	MO	Kansas City Plant	<0.5	250	250	<0.5	220	220	(12)
Albuquerque	NM	Los Alamos National Laboratory	2,475	536	3,011	1,866	266	2,132	(29)
Albuquerque	TX	Pantex Plant	168	1611	1,779	293	307	600	(34)
Albuquerque	FL	Pinellas Plant	26	37	63	47	66	113	79
Albuquerque	CA	Sandia National Laboratories/California	40	59	99	12	39	51	(48)
Albuquerque	NM	Sandia National Laboratories/New Mexico	102	236	338	58	159	217	(36)
Albuquerque	*NM*	*Waste Isolation Pilot Plant*[2]	*0*	*5*	*5*	*n/a*	*n/a*	*n/a*	*n/a*
Chicago	IA	Ames Laboratory	3	10	13	2	14	16	23
Chicago	IL	Argonne National Laboratory-East	441	3,684	4,125	503	2,373	2,876	30
Chicago	ID	Argonne National Laboratory-West	567	9	576	783	18	801	39
Chicago	OH	Battelle Columbus Laboratories	501	0	501	901	0	901	80
Chicago	NY	Brookhaven National Laboratory	341	85	426	235	105	340	(20)
Chicago	IL	Fermi National Accelerator Laboratory	142	67	209	63	84	147	(30)
Chicago	NJ	Princeton Plasma Physics Laboratory	24	29	53	25	11	36	(32)
Chicago	*OH*	*RMI Decommissioning Project*[2]	*58*	*0*	*58*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	OR	Bonneville Power Administration	0	1,143	1,143	0	2,016	2,016	76
*HQ**	*VA*	*Continuous Electron Beam Accelerator Facility*[2,3]	*0*	*9*	*9*	*n/a*	*n/a*	*n/a*	*n/a*
*HQ**	*WV*	*Morgantown Energy Technology Center*[2]	*0*	*2*	*2*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	*CO*	*Naval Oil Shale Reserve No. 3*[2]	*0*	*0*	*0*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	*CA*	*Naval Petroleum Reserve No. 1*[2]	*0*	*66*	*66*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	*WY*	*Naval Petroleum Reserve No. 3*[2]	*0*	*1*	*1*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	*TN*	*Office of Scientific and Technical Information*[2]	*0*	*2*	*2*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	PA	Pittsburgh Energy Technology Center	0	6	6	0	6	6	0
HQ	*OK*	*Southwestern Power Administration*[2]	*0*	*8*	*8*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	*LA*	*Strategic Petroleum Reserve Office*[2]	*0*	*2*	*2*	*n/a*	*n/a*	*n/a*	*n/a*
HQ	CO	Western Area Power Administration	0	325	325	0	185	185	(43)
HQ	MT	Western Environmental Technology Office	0	1	1	<0.5	0	0	(100)
HQ	*NV*	*Yucca Mountain Site Characterization Project*[2]	*0*	*<0.5*	*<0.5*	*n/a*	*n/a*	*n/a*	*n/a*
Idaho	*ID*	*Idaho Chemical Processing Plant*[2,4]	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Idaho	ID	Idaho National Engineering Laboratory[4]	780	8	788	2,669	2,239	4,908	523
Nevada	NV	Nevada Test Site	<0.5	3,710	3,710	1	4,441	4,442	20
Nevada	NV	North Las Vegas Facility	0	14	14	0	23	23	64
Oak Ridge	TN	Formerly Utilized Sites Remedial Action Program	0	0	0	0	0	0	0
Oak Ridge	*TN*	*Oak Ridge Institute for Science and Education*[2]	*14*	*<0.5*	*14*	*n/a*	*n/a*	*n/a*	*n/a*
Oak Ridge	TN	Oak Ridge K-25 Site	1,168	0	1,168	1,578	0	1,578	35
Oak Ridge	TN	Oak Ridge National Laboratory	1,724	59	1,783	3,359	72	3,431	2
Oak Ridge	TN	Oak Ridge Y-12 Plant	3,995	0	3,995	2,309	0	2,309	(42)
Oak Ridge	KY	Paducah Gaseous Diffusion Plant	665	0	665	0	0	0	(100)
Oak Ridge	OH	Portsmouth Gaseous Diffusion Plant	2,251	0	2,251	0	0	0	(100)
Oak Ridge	*TX*	*Superconducting Super Collider Laboratory*[2]	*0*	*9*	*9*	*n/a*	*n/a*	*n/a*	*n/a*
Oak Ridge	MO	Weldon Spring Site Remedial Action Project	9	0	9	0	0	0	(100)
Oakland	CA	Energy Technology Engineering Center	3	50	53	0	45	45	(15)
Oakland	CA	Lawrence Berkeley National Laboratory	70	247	317	28	90	118	(63)
Oakland	CA	Lawrence Livermore National Laboratory	297	615	912	158	385	543	(40)
Oakland	CA	Stanford Linear Accelerator Center	0	132	132	81	906	987	647
Ohio	OH	Fernald Environmental Management Project	2,176	4	2,180	584	0	584	(73)
Ohio	OH	Mound Plant	1,779	96	1,875	2,800	41	2,841	52
Ohio	NY	West Valley Demonstration Project	1,444	7	1,451	1,410	5	1,415	(2)
Richland	WA	Hanford Site	3,718	201	3,919	4,771	209	4,980	27
Richland	WA	Pacific Northwest National Laboratory	796	17	813	610	85	695	(15)
Rocky Flats	*CA*	*Oxnard Facility*[2]	*0*	*3*	*3*	*n/a*	*n/a*	*n/a*	*n/a*
Rocky Flats	CO	Rocky Flats Environmental Technology Site	1,194	34	1,228	744	9	753	(39)
Savannah	SC	Savannah River Site	14,674	65	14,739	9,491	77	9,568	(35)
Grand Total All 1994 Reporting Sites			41,606	13,354	54,960	35,396	14,501	49,897	(9)
Grand Total All 1993 Reporting Sites[2]			*72*	*108*	*180*	*n/a*	*n/a*	*n/a*	*n/a*

1 *Assuming one cubic meter is equivalent to one metric ton.*
2 *1993 reporting sites that did not qualify to report in 1994 are highlighted by italics.*
3 *In May 1996, the Continuous Electron Beam Accelerator Facility was renamed the Thomas Jefferson National Accelerator Facility.*
4 *In 1994, the Idaho Chemical Processing Plant reported in combination with the Idaho National Engineering Laboratory rather than as a separate reporting site.*
n/a *Not Applicable*

Figure 4.1 DOE Complex-Wide Routine Operations Waste Generation by Operations Office 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

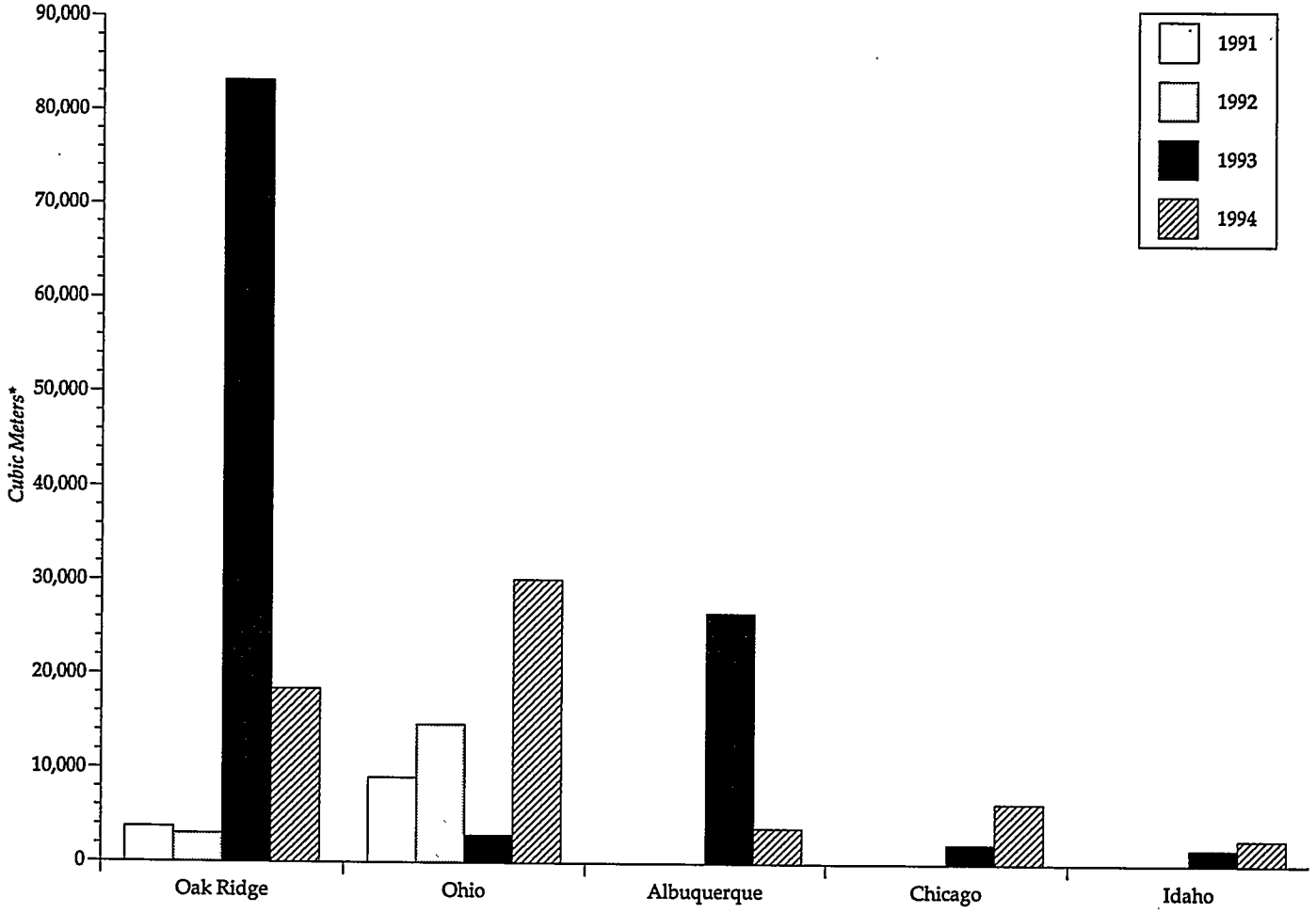
commercialization, and national energy objectives. In addition, the Albuquerque Operations Office oversees a system for safe and secure transport of all Government-owned special material of strategic quantities.

Albuquerque Operations Office reporting sites generated 40,782 cubic meters of waste in 1994, approximately 16 percent of the DOE complex waste generation total. Sanitary waste generation of 33,656 metric tons constituted 83 percent of all waste generated by this operations office, and 26 percent of all sanitary waste generated by the DOE complex.

In 1994, Albuquerque Operations Office reporting sites generated 84 cubic meters of transuranic waste, approximately 11 percent of the DOE complex total for this waste type. All of the transuranic waste was generated at the Los Alamos National Laboratory, primarily due to activities to bring backlogged waste into compliance with waste acceptance criteria. Only small quantities of low-level radioactive (3,787 cubic meters) and low-level mixed waste (157 cubic meters) were generated in 1994. High-level waste was not generated by Albuquerque Operations Office reporting sites.

Low-level mixed waste generation increased from 89 cubic meters in 1993 to 157 cubic meters in 1994, due to asbestos wastes being included in this waste type for the first time by the Los Alamos National Laboratory. Sanitary waste generation decreased from 38,522 metric tons in 1993 to 33,656 metric tons in 1994.

Figure 4.2 DOE Complex-Wide Cleanup/Stabilization Waste Generation by Operations Office 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

4.3 *Chicago Operations Office*

The Chicago Operations Office performs technical and business development activities in support of DOE. This operations office is responsible for energy research, development, and construction, including administration of operating contracts for five of the Nation's major government-owned laboratories.

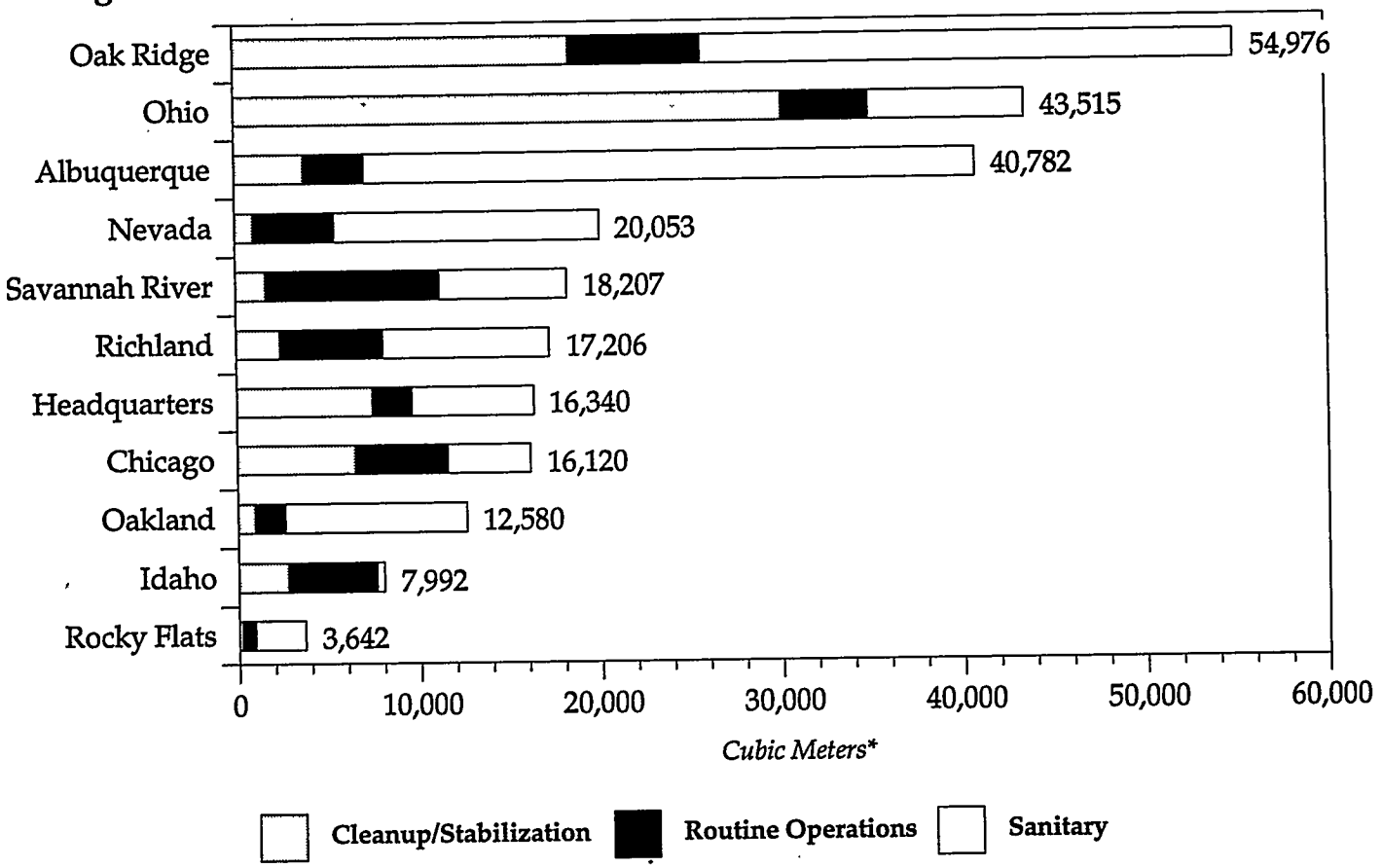
In 1994, Chicago Operations Office reporting sites generated 16,491 cubic meters of waste, approximately seven percent of the DOE complex waste generation total. Seven cubic meters of transuranic, 4,799 cubic meters of low-level radioactive, 387 cubic meters of low-level mixed, 6,275 metric tons of hazardous, and 4,552 metric tons of sanitary waste were generated in 1994. High-level waste was not generated by Chicago Operations Office reporting sites.

Low-level radioactive, low-level mixed, and hazardous waste generation increased from 1993 to 1994. Toxic Substances Control Act regulated hazardous waste generation increased due to continuing polychlorinated biphenyl transformer replacements in 1994.

4.4 *Idaho Operations Office*

The Idaho Operations Office is responsible for the administration and management of assigned programs, alternate energy technology development and demonstration projects, chemical processing operations and demonstration, environmental restoration and waste management operations, and nuclear reactor safety research, development, and demonstration.

Figure 4.3 1994 Waste Generation by Operations Office and Waste Category



* *Assuming one cubic meter is equivalent to one metric ton.*

In 1994, Idaho Operations Office reporting sites generated 7,992 cubic meters of waste, approximately three percent of the DOE complex waste generation total. The wastes generated were primarily low-level radioactive (4,699 cubic meters) and hazardous (2,249 metric tons). High-level, transuranic, low-level mixed, and sanitary waste were generated in small quantities, primarily by cleanup/stabilization operations.

Low-level radioactive waste generation increased from 3,701 cubic meters in 1993 to 4,699 cubic meters in 1994 due to activities to bring backlogged waste into compliance, and decommissioning projects at the Idaho National Engineering Laboratory. Low-level mixed waste generation increased from 38 cubic meters in 1993 to 345 cubic meters 1994. Sanitary waste generation decreased from 3,091 metric tons in 1993 to 389 metric tons in 1994. High-level waste generation increased 107 percent in 1994, to 307 cubic meters from 149 in 1993.

4.5 *Nevada Operations Office*

The Nevada Operations Office provides support for national security, crisis management, energy, environmental management, science and technology development, and environmental cleanup in the Pacific area.

In 1994, Nevada Operations Office reporting sites generated 89 cubic meters of low-level radioactive, 32 cubic meters of low-level mixed, 5,330 metric tons of hazardous, and 14,602 metric tons of sanitary waste, contributing eight percent of the DOE complex waste generation total. High-level and transuranic waste were not generated by Nevada Operations Office reporting sites.

Low-level radioactive waste generation decreased from 249 metric tons in 1993 to 89 metric tons in 1994. Hazardous and sanitary waste generation increased between 1993 and 1994 due to increased environmental restoration and decommissioning projects.

4.6 *Oakland Operations Office*

The Oakland Operations Office serves the public by managing world-class national research and development facilities, and by administering contracts to achieve DOE's program goals and priorities.

In 1994, Oakland Operations Office reporting sites generated 12,230 cubic meters of waste, five percent of the DOE complex waste generation total. Sanitary waste was the largest waste volume generated (9,972 metric tons, 82 percent of the total). Hazardous waste generation totaled 2,178 metric tons. Small quantities of transuranic, low-level radioactive, and low-level mixed waste were generated. High-level waste was not generated by Oakland Operations Office reporting sites in 1994. Generation of all waste types decreased in 1994.

4.7 *Oak Ridge Operations Office*

The Oak Ridge Operations Office provides weapons component dismantlement, maintains the nation's inventory of enriched uranium and lithium, conducts a diversified research and development program on a variety of energy technologies, performs environmental management activities, oversees nuclear safety for enrichment facilities, and provides technical assistance training.

In 1994, Oak Ridge Operations Office reporting sites generated 22 percent of the DOE complex waste generation total (54,976 cubic meters). Sanitary waste was the largest waste volume generated (29,228 metric tons). Approximately 11,468 cubic meters of low-level mixed waste was generated, and small quantities of transuranic and hazardous waste were generated. High-level waste was not generated by Oak Ridge Operations Office reporting sites.

There was a significant decrease in low-level radioactive waste generation from 1993 to 1994 due to reclassification of waste at the Weldon Spring Site Remedial Action Project. A total of 13,682 cubic meters of low-level radioactive waste was generated in 1994 compared to 86,487 cubic meters in 1993. Low-level mixed, hazardous, and sanitary waste quantities increased due to environmental restoration projects.

4.8 *Ohio Operations Office*

The Ohio Operations Office provides administrative, financial, and technical support to Area Offices, allowing them to complete their environmental restoration, waste management, and economic development activities in support of DOE's goals.

In 1994, Ohio Operations Office reporting sites generated 43,515 cubic meters of waste, 17 percent of the DOE complex waste generation total. Approximately 80 percent (34,837 cubic meters) of the waste generated was low-level radioactive waste, and approximately 20 percent (8,538 metric tons) was sanitary waste.

Low-level radioactive, low-level mixed, and sanitary waste generation increased in 1994 due to remediation field work at the Fernald Environmental Management Project. High-level and transuranic waste were not generated by Ohio Operations Office reporting sites.

4.9 *Richland Operations Office*

The Richland Operations Office manages waste products by researching, developing, applying, and commercializing technologies in waste management, and environmental restoration. Engineering, scientific, and research programs are conducted on environmental restoration, tank waste remediation, waste management, nuclear energy, and energy research.

In 1994, Richland Operations Office reporting sites generated approximately 17,206 cubic meters of waste, four percent of the DOE complex waste generation total. Low-level radioactive (4,704 cubic meters), low-level mixed (2,334 cubic meters), and sanitary waste (9,156 metric tons) were the largest waste volumes generated. Small quantities of transuranic and hazardous waste were generated. High-level waste was not generated by Richland Operations Office reporting sites in 1994.

Transuranic waste generation decreased from 382 cubic meters in 1993 to 299 cubic meters in 1994. Low-level radioactive, low-level mixed, hazardous, and sanitary waste generation increased due to environmental restoration activities.

4.10 Rocky Flats Operations Office

The Rocky Flats Operations Office manages wastes and materials, environmental cleanup operations, and conversion of the Rocky Flats Environmental Technology Site to beneficial use.

In 1994, Rocky Flats Operations Office reporting sites generated 3,642 cubic meters of waste, one percent of the DOE complex waste generation total. Sanitary waste was the largest waste volume generated (2,732 metric tons). Small quantities of transuranic, low-level radioactive, low-level mixed, and hazardous waste were generated. High-level waste was not generated by Rocky Flats Environmental Technology Site.

Low-level radioactive waste generation decreased from 691 cubic meters to 539 cubic meters and low-level mixed waste generation decreased from 489 cubic meters to 288 cubic meters from 1993 to 1994. Sanitary waste generation decreased from 3,217 metric tons to 2,732 metric tons, primarily due to increased recycling.

4.11 Savannah River Operations Office

The Savannah River Operations Office serves the national interest by providing leadership, direction, and oversight to ensure that Savannah River Site programs, operations, and resources are managed in an open, safe, environmentally sound, and cost effective manner. The Operation's previous mission was to produce nuclear materials for national defense.

In 1994, the Savannah River Site generated 18,207 cubic meters of waste, approximately three percent of the DOE complex waste generation total. Low-level radioactive waste (8,254 cubic meters) and sanitary waste (7,007 metric tons) were the largest waste volumes generated. Due to continued production activities, the Savannah River Operations Office is the major source of high-level waste generation within the DOE complex; 1,764 cubic meters of high-level waste was generated in 1994, which is 85 percent of the total high-level waste generated.

High-level waste generation increased from 1,559 cubic meters in 1993 to 1,764 cubic meters in 1994 due to a cleanout and restart of the F-Canyon separation process. Transuranic and low-level radioactive waste generation decreased from 1993 to 1994 due to improved handling and packaging, increased emphasis on waste minimization, and a decline in activity at the plutonium processing facility. Low-level mixed, hazardous, and sanitary waste generation increased in 1994. Hazardous waste increased due to simulated feed materials being used in the vitrification process and fluorescent light bulbs being classified as hazardous waste. Sanitary waste increased due to asbestos generation.

4.12 Waste Generation by Site

The total amount of waste attributed to each operations office is determined by the reporting sites managed by that operations office. The quantities of each waste type generated are the result of activities performed at each individual site during 1994. The following discussions identify the sites with the largest waste generation volume in 1994 categorized by the type of waste produced, not the operations office affiliation.

4.12.1 High-Level Waste

In 1994 as in the previous three years, only two sites reported generation of high-level waste: the Savannah River Site and the Idaho National Engineering Laboratory (Figure 4.4). The Savannah River Site generated the largest volume of high-level waste in 1994 (1,764 cubic meters), accounting for 85 percent of the 1994 DOE complex total.

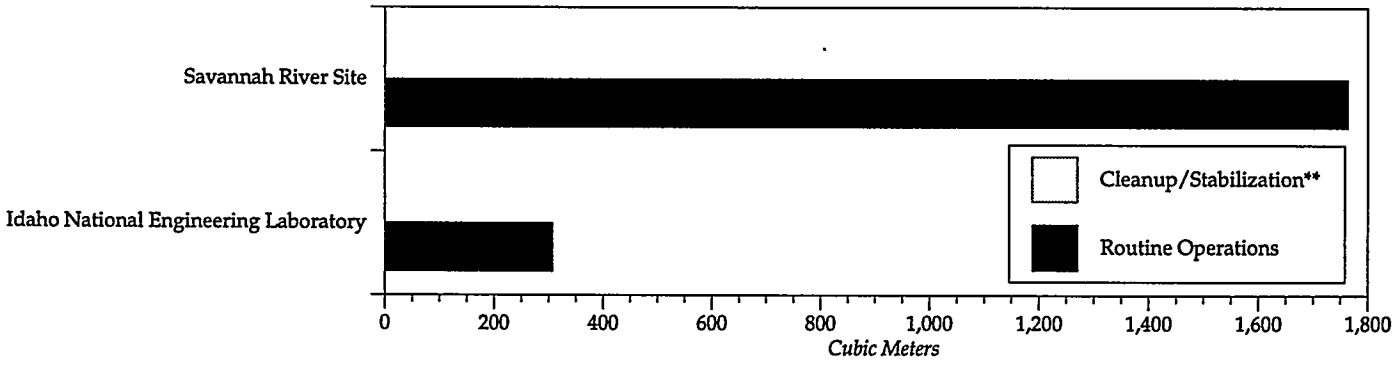
4.12.2 Transuranic Waste

The Savannah River Site, Hanford Site, and Los Alamos National Laboratory generated the largest volume of transuranic waste in 1994 (Figure 4.5). Transuranic waste generation is attributed to routine operations activities, with the exception of the Savannah River Site, which generated approximately 172 cubic meters of transuranic waste from cleanup/stabilization activities.

4.12.3 Low-Level Radioactive Waste

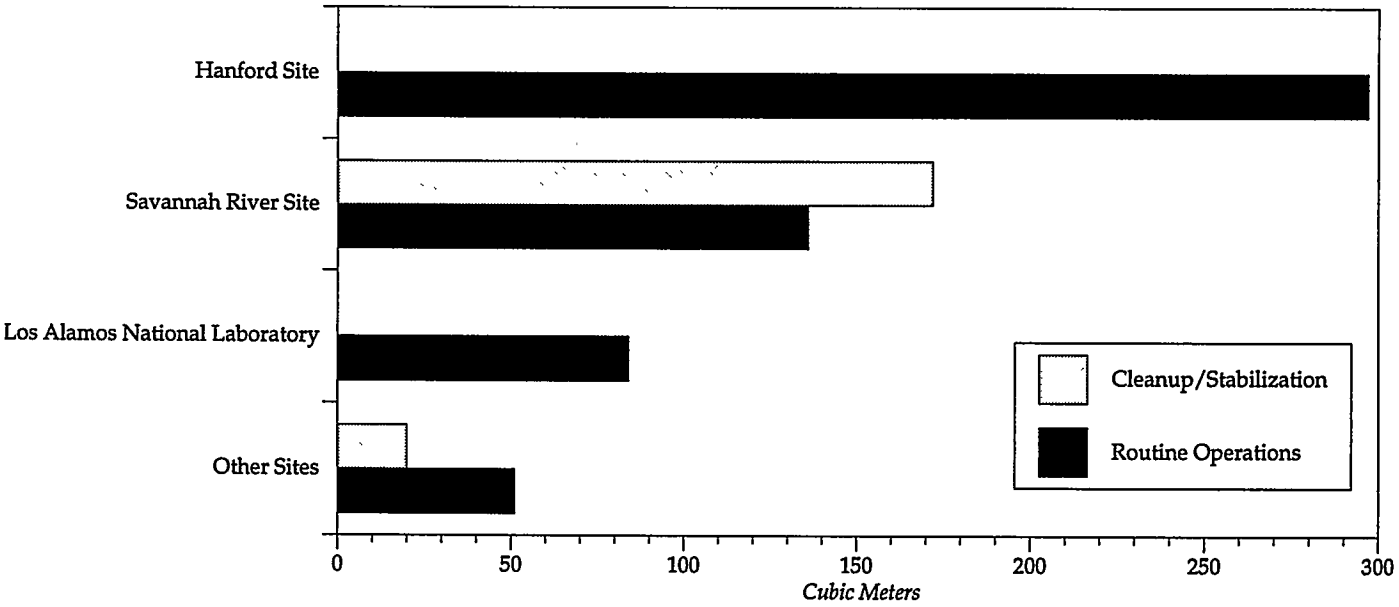
The Fernald Environmental Management Project generated the largest volume of low-level radioactive waste in 1994 (30,632 cubic meters), 67 percent of the total cleanup/stabilization low-level radioactive waste generated (Figure 4.6). Low-level waste generation increased at the Oak Ridge National Laboratory as a result of conservative safety policies

Figure 4.4 Largest High-Level Waste Generation in 1994 by Site



** *No cleanup/stabilization waste was reported in the high-level waste category.*

Figure 4.5 Largest Transuranic Waste Generation in 1994 by Site



and increased environmental restoration. Waste generation increased at the Idaho National Engineering Laboratory as a result of decommissioning projects and activities to bring backlogged waste into compliance.

4.12.4 *Low-Level Mixed Waste*

The Oak Ridge K-25 Site, Hanford Site, Portsmouth Gaseous Diffusion Plant, and Savannah River Site generated the largest volume of low-level mixed waste in 1994, primarily resulting from cleanup/stabilization operations (Figure 4.7).

4.12.5 *Hazardous Waste*

The Bonneville Power Administration, the Argonne National Laboratory–East, and the Nevada Test Site generated the largest volume of hazardous waste in 1994 (Figure 4.8). Cleanup of polychlorinated biphenyl-contaminated soil, debris, and equipment removed from the Bonneville Power Administration contributed 7,017 metric tons (54 percent) of the cleanup/stabilization hazardous waste generation total. At the Nevada Test Site, remediation of hydrocarbon spills resulted in an increase in State regulated hazardous waste.

4.12.6 *Sanitary Waste*

The Oak Ridge Y-12 Plant generated the largest volume of sanitary waste in 1994 (21,367 metric tons), the result of demolition activities at the Plant. Other significant generators of sanitary waste include the Sandia National Laboratories/New Mexico, Nevada Test Site, Hanford Site, and Los Alamos National Laboratory (Figure 4.9). ■

Figure 4.6 Largest Low-Level Radioactive Waste Generation in 1994 by Site

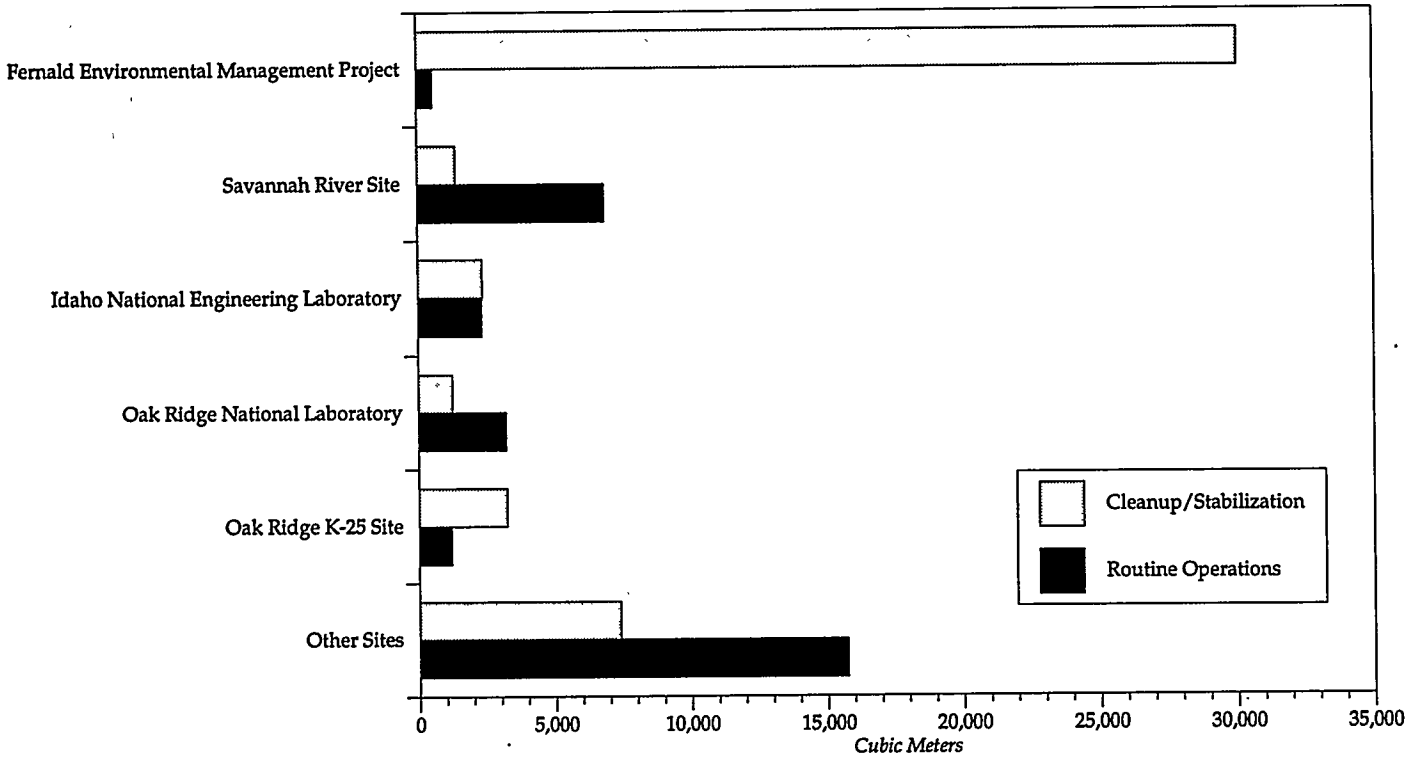


Figure 4.7 Largest Low-Level Mixed Waste Generation in 1994 by Site

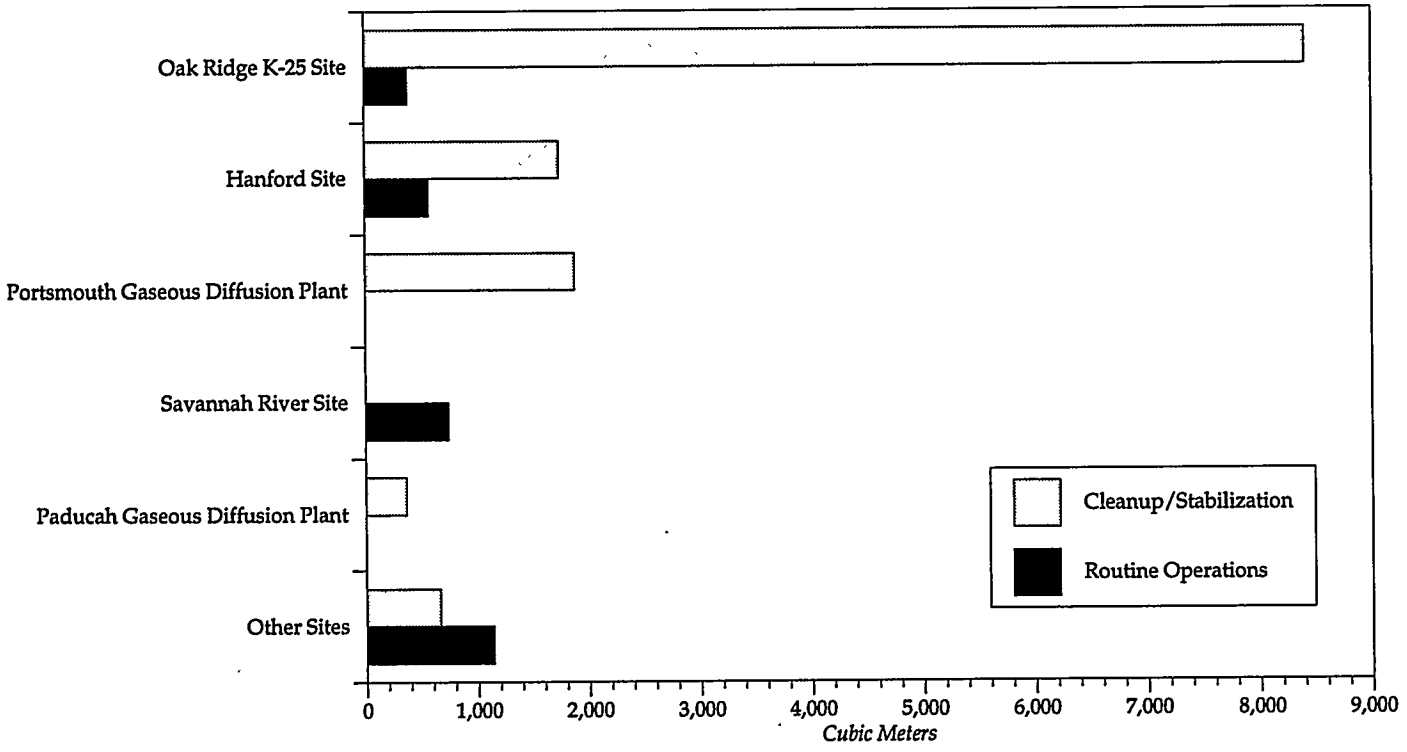


Figure 4.8 Largest Hazardous Waste Generation in 1994 by Site

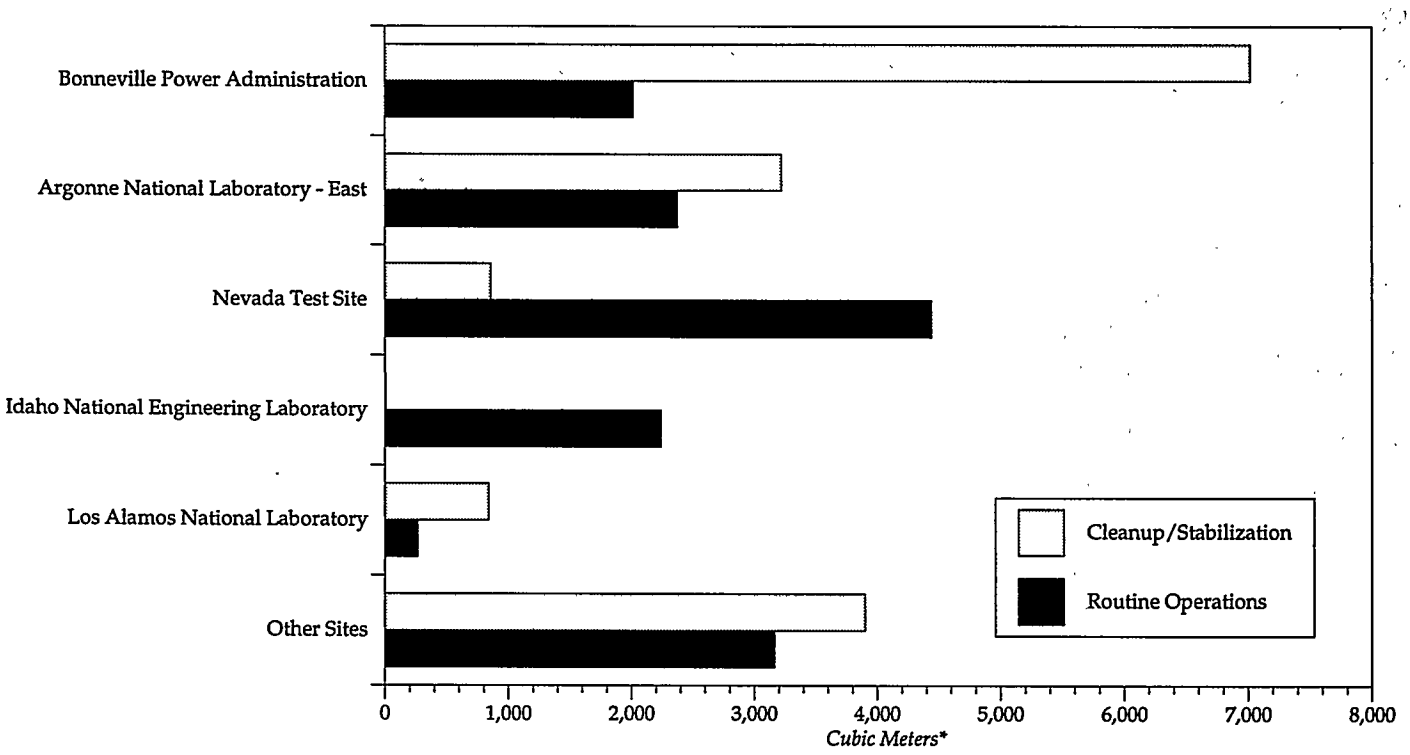
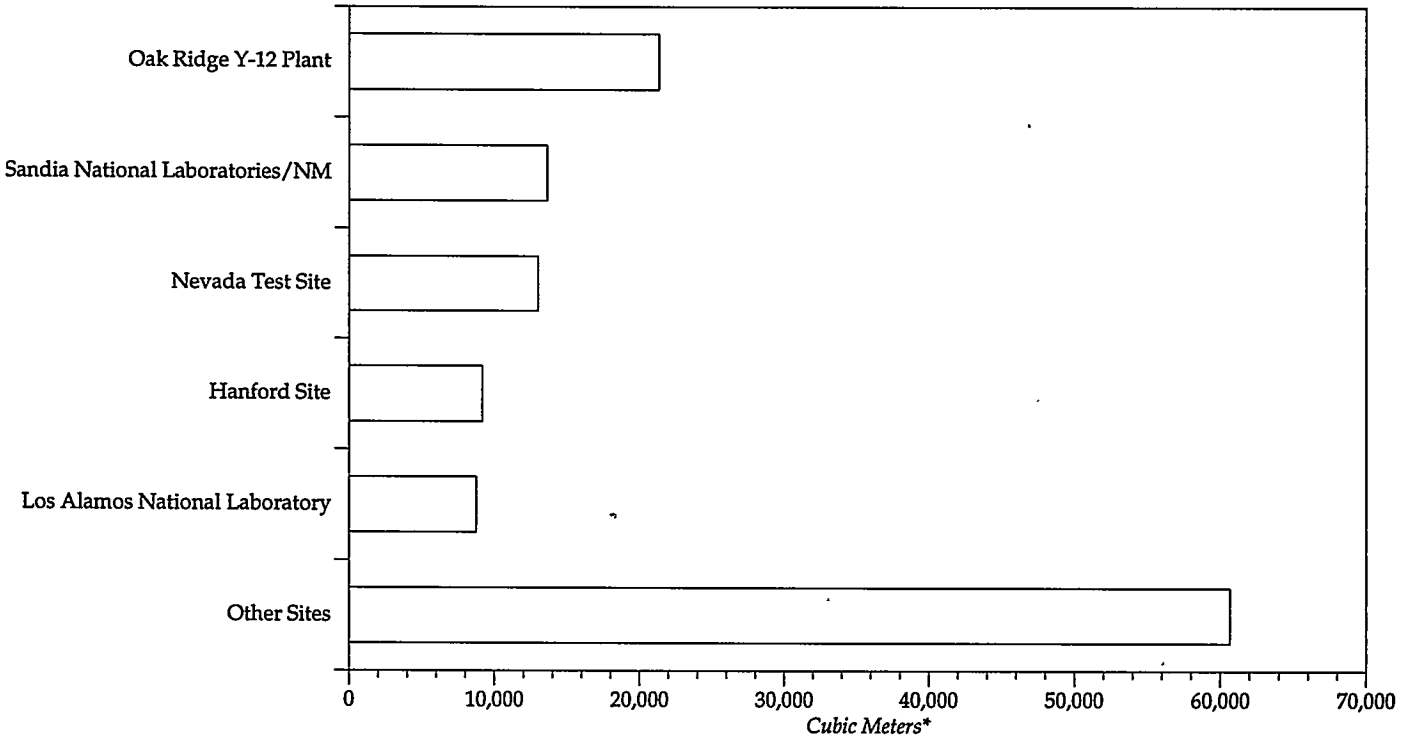


Figure 4.9 Largest Sanitary Waste Generation in 1994 by Site



Chapter 5.0

STATE PROGRAMS AND POLLUTION PREVENTION ACTIVITIES

This Chapter provides an overview of 1994 waste generation, pollution prevention, and recycling efforts by the 39 DOE reporting sites. A reporting site may generate waste in more than one State, and in such instances, all waste generation is attributed to the State in which the majority of operations occur.

Figures 5.1 and 5.2 illustrates DOE complex-wide routine operations and cleanup/stabilization waste generation trends by site from 1991 through 1994. Table 5.1 presents the total 1994 routine operations and cleanup/stabilization waste generation quantities by waste type for the 26 States where DOE reporting sites are located.

5.1 *Routine Operations Waste*

The largest volume of routine operations waste was generated in the State of South Carolina, accounting for approximately 19 percent of the DOE complex total in 1994. Activities in the State of Tennessee contributed approximately 14 percent of the total routine operations waste generated.

5.2 *Cleanup/Stabilization Waste*

Low-level radioactive waste accounted for approximately 61 percent of the total DOE complex cleanup/stabilization waste generated in 1994, and hazardous waste accounted for approximately 21 percent. DOE activities in the State of Ohio generated the majority of the cleanup/stabilization waste produced in 1994 (43 percent).

5.3 *Sanitary Waste*

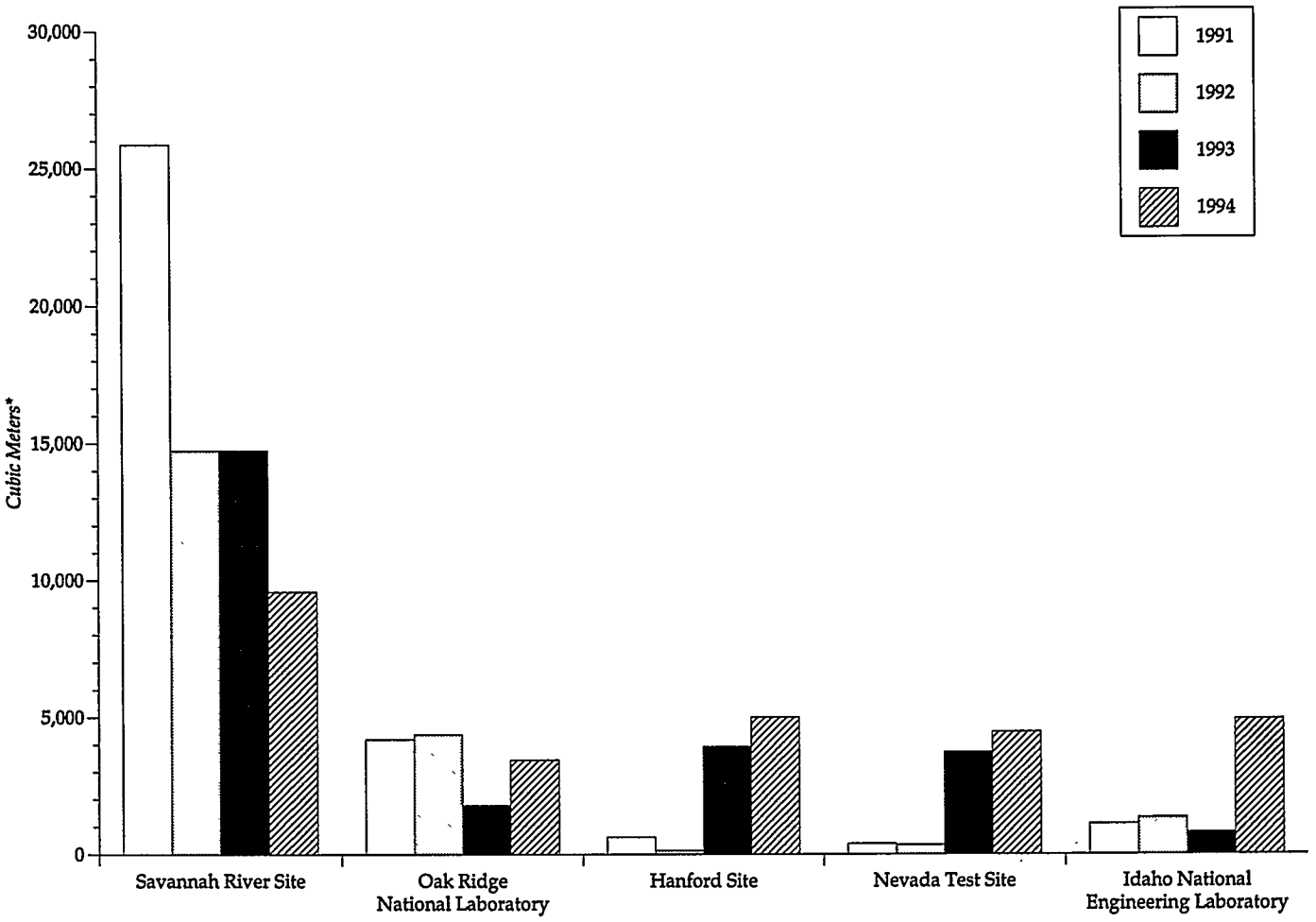
For 1994, specification of a source for sanitary waste data was optional; therefore, sanitary waste data is listed in this Report as a combination of routine operations and cleanup/stabilization, unless otherwise noted. Routine operations sanitary waste data are provided in the individual site Fact Sheets, which are presented alphabetically beginning on page 41.

5.4 *Waste Generation Trends From 1991–1994*

Figure 5.1 illustrates the sites that generated the greatest quantity of routine operations waste from 1991–1994.

Waste generated by the Savannah River Site decreased in 1994 due to a contract award fee provision tied to reductions in low-level waste generation by the operations contractor at the site. Low-level waste generation increased at the Oak Ridge National Laboratory as a result of conservative safety policies and increased environmental restoration. Waste generation increased at the Hanford Site due to environmental restoration activities conducted in 1993 and 1994. At the Nevada Test Site, remediation of hydrocarbon spills resulted in an increase in State regulated hazardous waste. Waste generation increased at the Idaho National Engineering Laboratory as a result of decommissioning projects

Figure 5.1 DOE Complex-Wide Routine Operations Waste Generation by Site 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

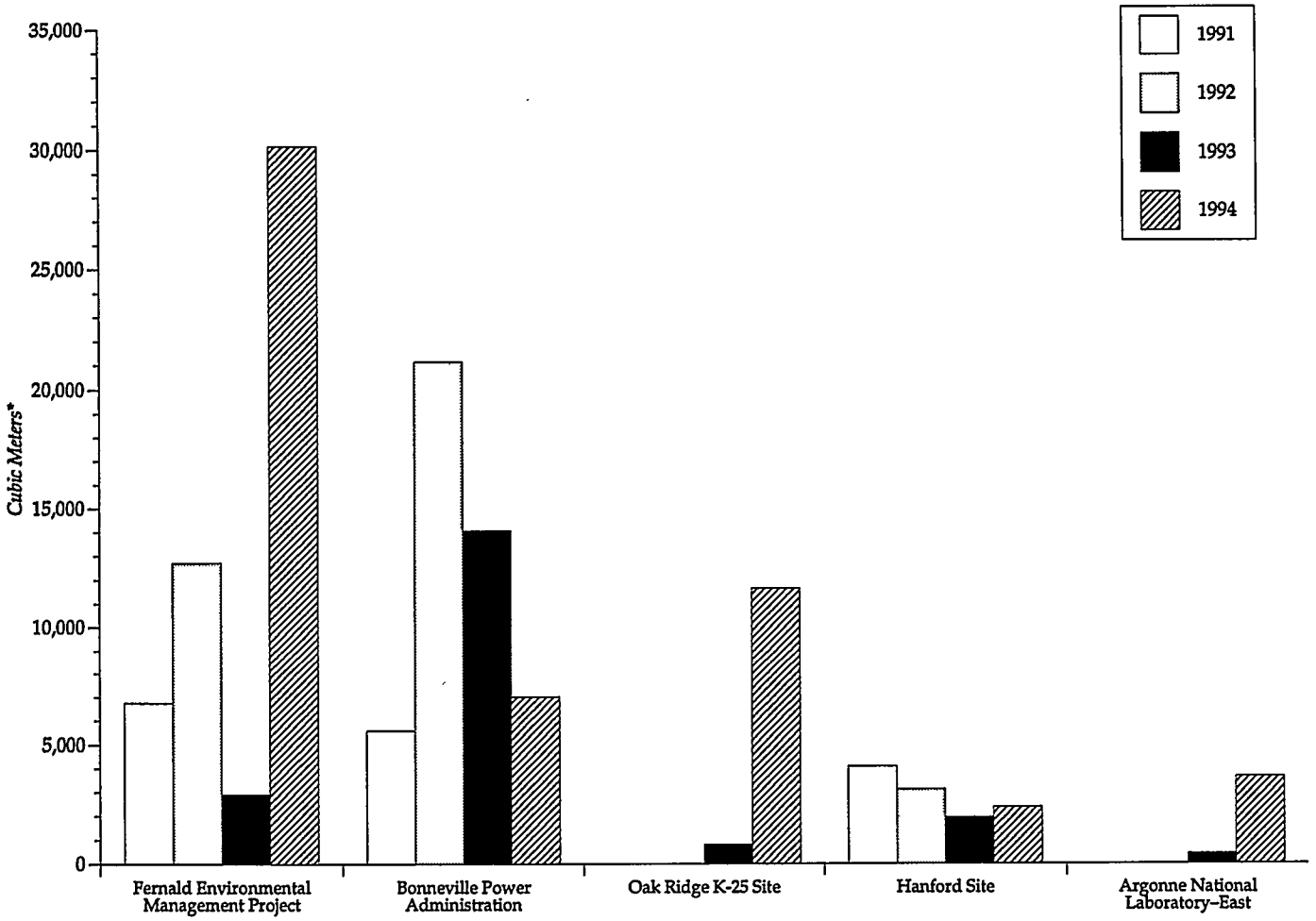
and activities to bring backlogged waste into compliance.

Figure 5.2 illustrates the sites that generated the greatest quantity of cleanup/stabilization waste from 1991–1994. The Fernald Environmental Management Project contributed 91 percent of the total cleanup/stabilization waste generated by the State of Ohio due to safe-shutdown activities and the completion of the Plant 7 decommissioning project. Cleanup of polychlorinated biphenyl-contaminated soil, debris, and equipment removed from the Bonneville Power Administration contributed 7,017 metric tons (54 percent) of the cleanup/stabilization hazardous waste generation total. The Oak Ridge K-25 Site and the Hanford Site generated cleanup/stabilization waste as a result of environmental restoration and decommissioning activities. Toxic Substances Control Act regulated hazardous waste generation increased at the Argonne National Laboratory–East due to continuing polychlorinated biphenyl transformer replacements in 1994.

5.5 *Recycling Activities*

Table 5.2 presents the quantities and types of materials recycled in 1994 on a State-by-State basis. Metals were the largest individual wastestream recycled, followed by the "other" recycling category. The recycling ratio (amount recycled divided by the sum of the amount recycled plus sanitary waste generation) is 0.31. Recycling activities have increased since 1991 due to sites taking a more active role in new recycling programs and better recordkeeping. Site-specific recycling activities and accomplishments are described in the individual site Fact Sheets, which are presented alphabetically beginning on page 41. ■

Figure 5.2 DOE Complex-Wide Cleanup/Stabilization Waste Generation by Site 1991 – 1994



** Assuming one cubic meter is equivalent to one metric ton.*

Table 5.1 1994 DOE Waste Generation by State and Waste Type
(in Cubic Meters)

State	High-Level Waste	Transuranic			Low-Level Radioactive			Low-Level Mixed			Hazardous*			Total Waste Excluding Sanitary	Sanitary
	Routine**	Routine	Cleanup/ Stabilization	TOTAL	Routine	Cleanup/ Stabilization	TOTAL	Routine	Cleanup/ Stabilization	TOTAL	Routine	Cleanup/ Stabilization	TOTAL		
Arizona	0	0	0	0	0	0	0	0	0	0	2	19	21	21	48
California	0	7	3	10	251	191	442	22	20	42	1,604	769	2,373	2,867	10,914
Colorado	0	8	16	24	461	78	539	275	13	288	15	49	64	915	2,732
Florida	0	0	0	0	47	0	47	0	0	0	66	39	105	152	191
Idaho	307	4	0	4	2,777	2,363	5,140	364	322	686	2,257	10	2,267	8,404	1,559
Illinois	0	6	0	6	541	436	977	19	0	19	2,457	3,635	6,092	7,094	2,494
Iowa	0	0	0	0	2	1,608	1,610	0	0	0	14	0	14	1,624	0
Kentucky	0	0	0	0	0	0	0	0	361	361	0	464	464	825	0
Missouri	0	0	0	0	0	0	0	0	15	15	220	321	541	556	8,671
Montana	0	0	0	0	0	0	0	0	0	0	2	0	2	2	6,350
Nebraska	0	0	0	0	0	0	0	0	0	0	7	7	14	14	8
Nevada	0	0	0	0	0	89	89	1	31	32	4,464	866	5,330	5,451	14,605
New Jersey	0	0	0	0	21	260	281	4	0	4	11	87	98	383	195
New Mexico	0	84	0	84	1,826	1,587	3,413	28	98	126	436	1,410	1,846	5,469	24,774
New York	0	0	0	0	1,634	238	1,872	11	23	34	110	23	133	2,039	2,201
North Dakota	0	0	0	0	0	0	0	0	0	0	7	0	7	7	0
Ohio	0	0	0	0	4,284	31,880	36,164	1	1,962	1,963	41	7	48	38,175	8,165
Oregon	0	0	0	0	0	0	0	0	0	0	8	0	8	8	201
Pennsylvania	0	0	0	0	0	803	803	0	0	0	6	2	8	811	99
South Carolina	1,764	136	172	308	6,850	1,404	8,254	741	0	741	77	56	133	11,200	7,007
South Dakota	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0
Tennessee	0	24	1	25	6,472	4,733	11,205	752	8,455	9,207	72	23	95	20,532	26,583
Texas	0	0	0	0	265	0	265	28	0	28	307	252	559	852	589
Utah	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0
Washington	0	299	0	299	4,486	218	4,704	596	1,738	2,334	2,304	7,436	9,740	17,077	9,156
Wyoming	0	0	0	0	0	0	0	0	0	0	20	371	391	391	7
TOTALS	2,071	568	192	760	29,917	45,888	75,805	2,842	13,038	15,880	14,509	15,846	30,355	124,871	126,549

* Assuming one cubic meter is equivalent to one metric ton.
** No cleanup/stabilization waste was generated in the high-level waste category.

Table 5.2 1994 DOE Recycling Activities by State
(in Metric Tons[a])

State	Number of Employees	Paper Products	Metals	Automotive	Other[b]	[Other Explanation]	*TOTAL[a]*
California	6,409	539	2,906	58	1,025	382 mt from diesel fuel, contaminated storage tanks, lamps & ballasts, spent solvent	*4,528*
Colorado	8,341	485	863	11	521	Used oil, antifreeze, electrical	*1,880*
Florida	883	22	99	<0.5	69	Plastics, glass, wood	*190*
Idaho	7,705	255	23	72	not tracked		*350*
Illinois	6,640	656	5,199	3	43	Additional 110 gal. antifreeze, 10 sets brake pads, 5 sets brake shoes	*5,901*
Iowa	464	12	91	1	not tracked		*104*
Kentucky	317	0	0	0	0		*0*
Missouri	3,933	181	779	42	19	Food waste, wood, copper etchant, computers	*1,021*
Montana	175	not tracked	not tracked	not tracked	not tracked		*not tracked*
Nevada	2,489	468	3,048	692	20		*4,228*
New Jersey	764	116	192	43	519	Additional - 314 toner cartridges (757 lbs.)	*870*
New Mexico	19,728	342	1,080	104	221	Antifreeze, coolant, concrete	*1,747*
New York	4,446	387	120	26	1,266	Nitric acid, clay, window oil, wooden pallets	*1,799*
Ohio	4,340	8,109	165	2	3	45,500 cans (Mound/not tracked)	*8,279*
Oregon	3,771	232	1,823	36	462	Scrap used tools, scrap communications equipment (ADP, electrical, mercury)	*2,553*
Pennsylvania	559	7	16	<0.5	<0.5		*23*
South Carolina	16,700	910	1,854	94	15	Antifreeze, solvent, silver fixation solution, coolant, batteries, drums, tires, toner cartridges	*2,873*
Tennessee	17,182	1,080	1,413	84	2,458		*5,035*
Texas	3,525	9	66	26	11	Antifreeze, freon, high explosive	*112*
Washington	18,043	676	2,060	126	11,922	[Includes 113 mt chemicals]	*14,784*
TOTAL	*126,414*	*14,486*	*21,797*	*1,420*	*18,574*		*56,277*

[a] *Quantities are estimates that have been rounded to the nearest whole number, assuming that one cubic meter is equivalent to one metric ton. Materials sent offsite for handling to be recycled by another party are not included in these estimates.*

[b] *Other materials may include: plastic, styrofoam, glass, toner cartridges, food/garden waste, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, and fly ash.*

SITE ACCOMPLISHMENTS

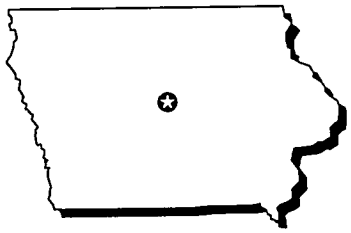
The remainder of this Chapter presents information on each of the 39 DOE reporting sites in alphabetical order by site name. **Please note that the Fact Sheet pages do *not* have page numbers printed on them in order to facilitate use as handouts.** Information provided includes the site mission, site description, types and amounts of routine operations waste generated from 1991 through 1994, an estimate of 1999 waste generation, and pollution prevention highlights and accomplishments.

Ames Laboratory
Argonne National Laboratory-East
Argonne National Laboratory-West
Battelle Columbus Laboratories
Bonneville Power Administration
Brookhaven National Laboratory
Energy Technology Engineering Center
Fermi National Accelerator Laboratory
Fernald Environmental Management Project
Formerly Utilized Sites Remedial Action Program
Hanford Site
Idaho National Engineering Laboratory
Inhalation Toxicology Research Institute
Kansas City Plant
Lawrence Berkeley National Laboratory
Lawrence Livermore National Laboratory
Los Alamos National Laboratory
Mound Plant
Nevada Test Site
North Las Vegas Facility
Oak Ridge K-25 Site
Oak Ridge National Laboratory
Oak Ridge Y-12 Plant
Pacific Northwest National Laboratory
Paducah Gaseous Diffusion Plant
Pantex Plant
Pinellas Plant
Pittsburgh Energy Technology Center
Portsmouth Gaseous Diffusion Plant
Princeton Plasma Physics Laboratory
Rocky Flats Environmental Technology Site
Sandia National Laboratories/California
Sandia National Laboratories/New Mexico
Savannah River Site
Stanford Linear Accelerator Center
Weldon Spring Site Remedial Action Project
Western Area Power Administration
Western Environmental Technology Office
West Valley Demonstration Project

Waste Generation and Pollution Prevention Progress

Fact Sheet

Ames Laboratory



Ames Laboratory – 1994

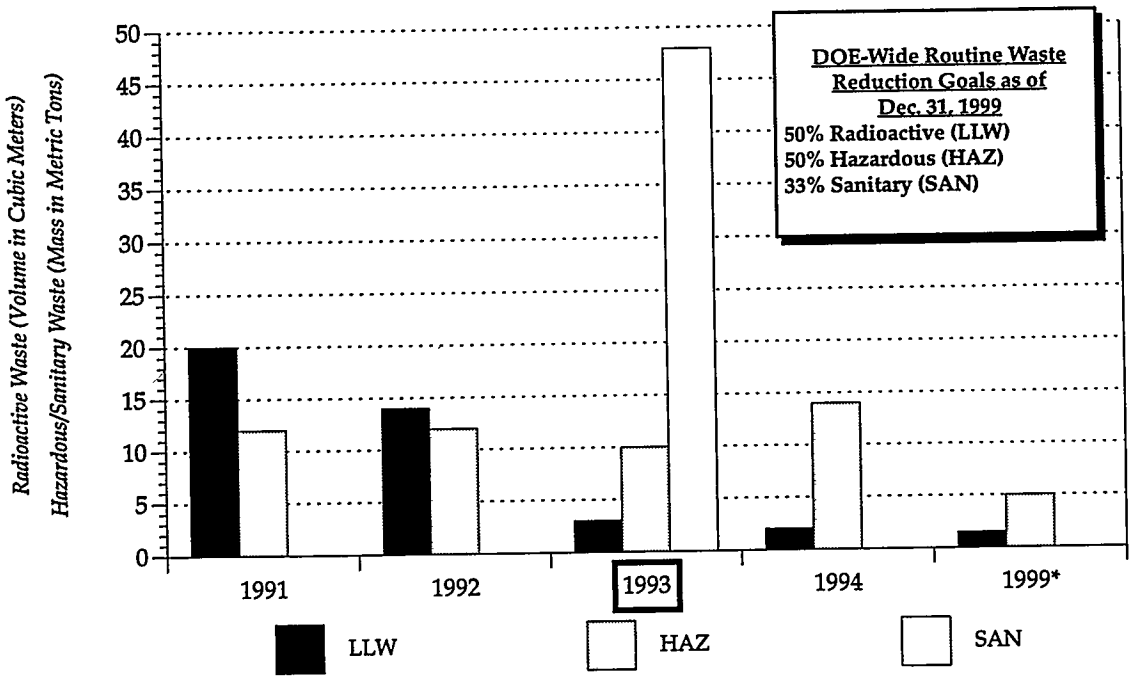
Location:	**Ames, Iowa**
Site Size:	**5 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**0**
Prime Contractor Employees:	**464**

Facility Mission

The primary mission of the Ames Laboratory is to conduct basic and intermediate-range applied research in physical, chemical, material, and mathematical and engineering sciences pertaining to energy generation, conversion, transmission and storage technologies, environmental improvement, and other technical areas essential to national needs. The research being performed at the Ames Laboratory increases general levels of knowledge and technical capabilities, prepares engineering and physical sciences students for academia and industry, and develops new technologies and practical applications that contribute to the strengthening of the U.S. economy.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

Note: Sanitary waste was not tracked in 1994.

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Routine waste generation increased at the Ames Laboratory in 1994 due to continued cleanup of laboratory spaces. The volume of waste generated should decrease in calendar year 1995, as there is very little legacy waste remaining at the facility.
- Toxic Substances Control Act regulated hazardous waste generation increased in 1994 due to removal of a transformer containing oil contaminated with low levels of polychlorinated biphenyls.
- The City of Ames uses solid sanitary waste in combination with coal as a form of refuse derived fuel. Glass and metal debris are removed from the sanitary wastestream for recycling prior to incineration. Therefore, essentially all sanitary waste generated by the Ames Laboratory is considered recycled.
- All metals other than precious metals are sold as scrap metal for recycling.

Materials Recycled by the Ames Laboratory in 1994

Recycled Material	Ames Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	1	1,420
Metals	91	21,797
Paper	12	14,486
Other Materials*	not tracked	18,574
GRAND TOTAL	*104*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Ames Laboratory may be obtained by contacting:

Ray Lang
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2230, FAX 630-252-2654

Kay M. Hannasch
Ames Laboratory
G40 TASF
Ames, IA 50011-3400
515-294-9769, FAX 515-294-2155

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Argonne National Laboratory–East

Argonne National Laboratory–East – 1994

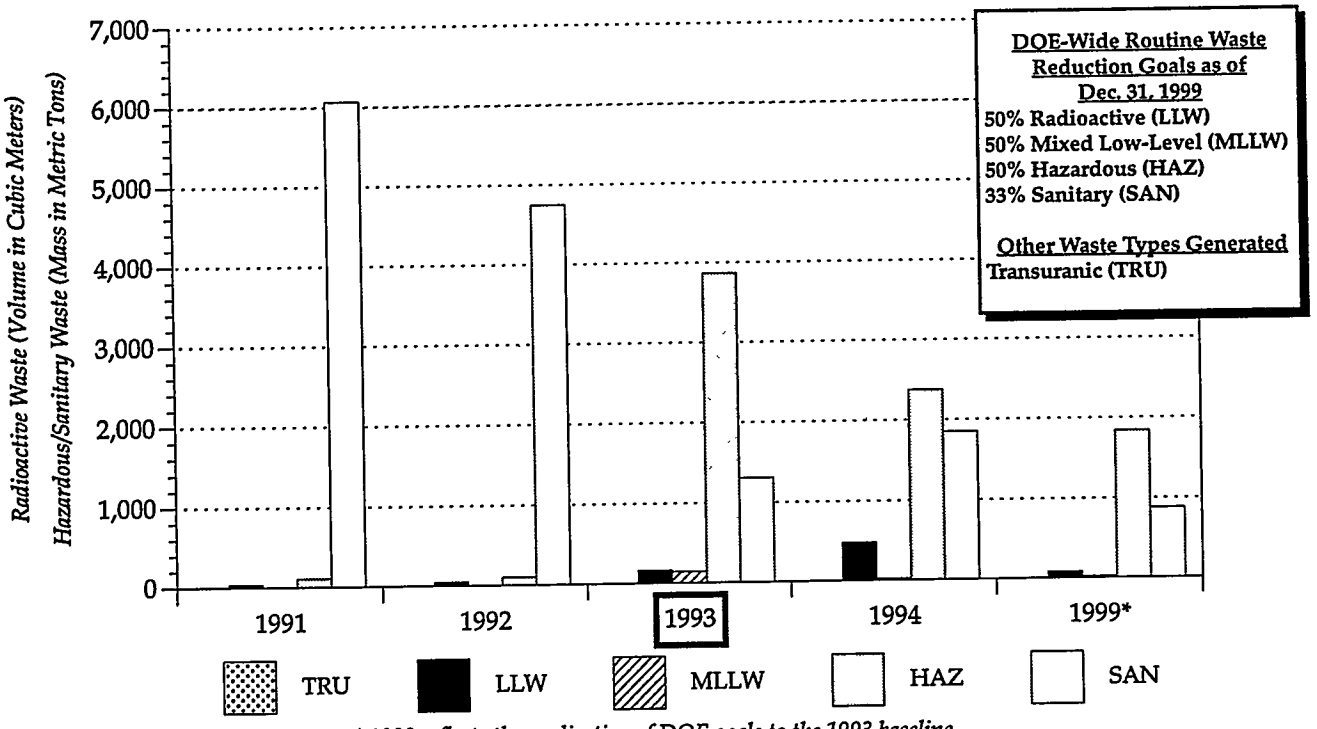
Location:	**Argonne, Illinois**
Site Size:	**1,700 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**425**
Prime Contractor Employees:	**4,100**

Facility Mission

The mission of the Argonne National Laboratory–East is to conduct research and development in many areas, including advanced-reactor development, superconductivity, improved use of coal for power generation, and electrochemical energy sources.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Radioactive wastes generated during the Building 212 Plutonium Gloveboxes Decommissioning and Decontamination Project were segregated using a waste assay system.
- Thirty-six of 76 rod storage holes were decontaminated, eliminating the need to remove the storage tubes by coring.
- Recovery and recycling of the air conditioner coolant Freon reduced emissions by 75 percent.
- Two facilities were reused for storage of mixed waste and road salt instead of demolishing them.
- After size reduction, three of 61 plutonium gloveboxes were reused onsite instead of shipping them offsite for disposal.
- An oil/water separator was used to process soluble machine coolants such as Cimcool, Trim-Sol, and Uniflo, which reduced Resource Conservation and Recovery Act (RCRA) regulated hazardous process wastewater by 90 percent.
- Developed and demonstrated programs to recycle isotopes such as plutonium.
- A metal recycling/reuse program resulted in ten million pounds of metal being sold for reuse as shielding.
- Materials recycled include paper, plastic, lead, batteries, glass, vehicle antifreeze, photographic film and processing filters, and refuse-derived fuel.

Materials Recycled by the Argonne National Laboratory–East in 1994

Recycled Material	Argonne National Laboratory–East *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	4,655	21,797
Paper	576	14,486
Other Materials*	41	18,574
GRAND TOTAL	*5,272*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Argonne National Laboratory–East may be obtained by contacting:

Ray Lang
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2230, FAX 630-252-2654

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9700 South Cass Ave., EMO/214
Argonne, IL 60439-4836
630-252-4911, FAX 630-252-9642

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Waste Generation and Pollution Prevention Progress Fact Sheet

Argonne National Laboratory–West

Argonne National Laboratory–West – 1994

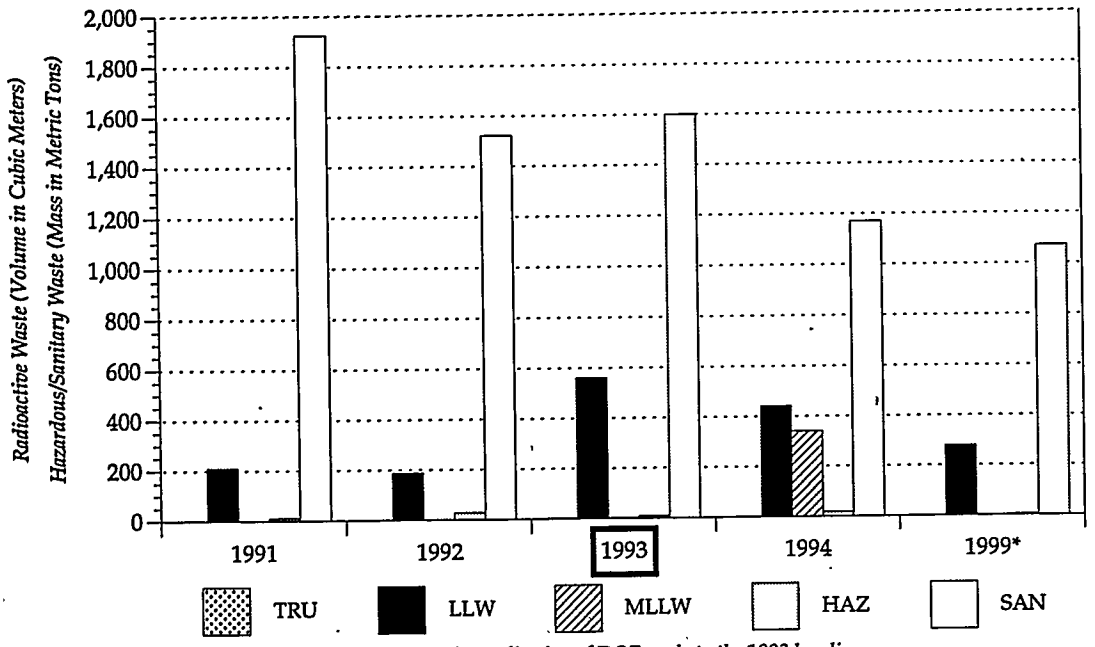
Location:	**Idaho Falls, Idaho**
Site Size:	**824 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Nuclear Energy**
DOE Employees:	**6**
Prime Contractor Employees:	**828**

Facility Mission

The Argonne National Laboratory–West is dedicated to the research and development of base technology liquid metal fast breeder reactors. The Integral Fast Reactor Project research program and ongoing operations will be terminated in fiscal year 1995, and the Redirected Program research will focus on the development of solutions for near-term high priority missions, including treatment of spent nuclear fuel, reactor and fuel cycle safety, and decommissioning technologies.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



DOE-Wide Routine Waste Reduction Goals as of Dec. 31, 1999

50% Radioactive (LLW)
50% Mixed Low-Level (MLLW)
50% Hazardous (HAZ)
33% Sanitary (SAN)

Other Waste Types Generated

Transuranic (TRU)

** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Clean lead shot (15.6 tons) and contaminated lead shot (10.5 tons) were reused as shielding for newly installed Radioactive Liquid Waste Tanks.
- Epoxy paints were replaced by latex paints to prevent generation of hazardous and/or mixed waste.
- Laboratory cleaning solutions were reused for industrial cleaning or degreasing.
- Concrete shield plugs were reused in remote-handled radioactive waste storage liners, eliminating 280 cubic feet of generated waste.
- Materials reused include cardboard and wooden boxes, drums, pallets, plastic bins, plastic bubble wrap, and styrofoam packing peanuts.
- Materials recycled include circuit boards, photographic waste and film scraps, lead, mercury, batteries, scrap metals, wood, Safety Kleen solvent, and waste oil.

Materials Recycled by the Argonne National Laboratory–West in 1994

Recycled Material	Argonne National Laboratory–West *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	3	1,420
Metals	8	21,797
Paper	0	14,486
Other Materials*	<0.5	18,574
GRAND TOTAL	*11*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Argonne National Laboratory–West may be obtained by contacting:

Ray Lang
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2230, FAX 630-252-2654

Roy Grant
Argonne National Laboratory–West
P.O. Box 2528
Idaho Falls, ID 83403-2528
208-533-7400, FAX 208-533-7984

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9/30/96-EM-gm240

Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Battelle Columbus Laboratories

Battelle Columbus Laboratories – 1994

Location:	**Columbus, Ohio**
Site Size:	**1,242 Acres**
Operations Office:	**Chicago***
Lead Program Office:	**Environmental Management**
DOE Employees:	**5**
Prime Contractor Employees:	**88**

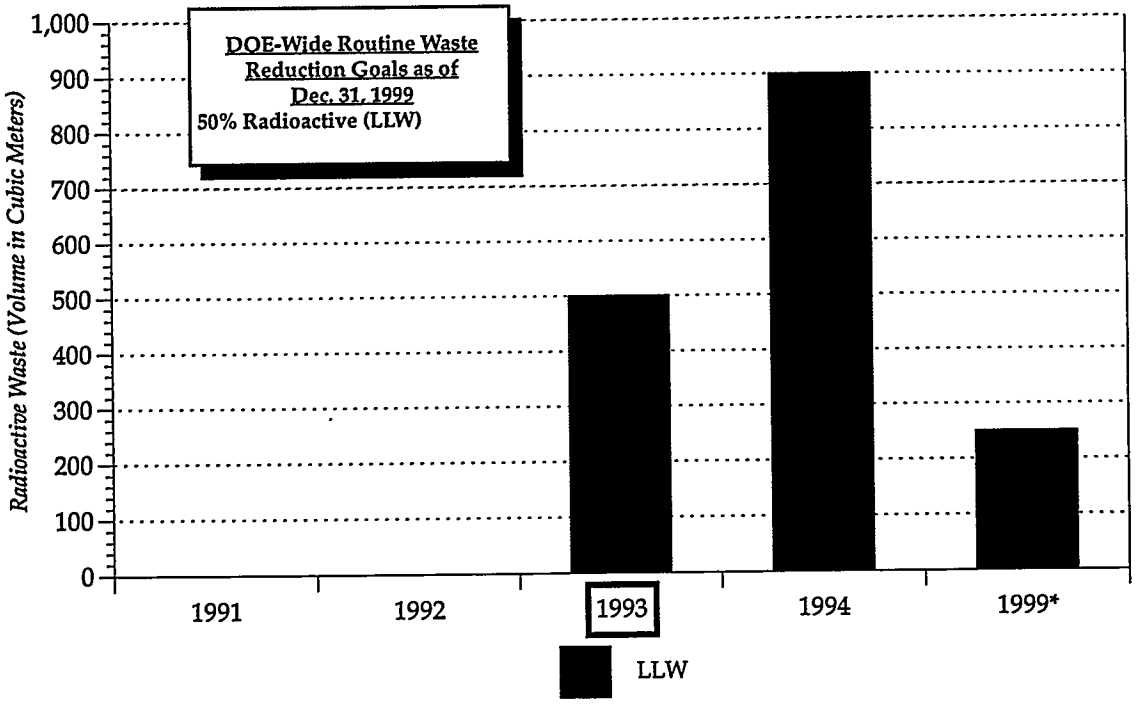
** Moved to the Ohio Operations Office as of January 1, 1996.*

Facility Mission

The Battelle Columbus Laboratories are being decommissioned under the Office of Environmental Management, as a condition of its Nuclear Regulatory Commission license. After decommissioning has been completed to satisfy the "free release" criteria identified in DOE Order 5400.5, the facility will be returned to the Battelle Memorial Institute without radiological restriction.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Radioactive mixed waste generation was reduced or eliminated through product substitution, sorting, and segregation.
- Incinerable/supercompactible low-level radioactive waste was shipped to the Scientific Ecology Group in Oak Ridge, Tennessee for processing, reducing waste disposal volume by 42-to-one.
- Recycled and reused 6,400 cubic feet of waste metals, including lead, for shielding and shipping containers.

Materials Recycled by the Battelle Columbus Laboratories in 1994

Recycled Material	Battelle Columbus Laboratories *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	22	21,797
Paper	not tracked	14,486
Other Materials*	not tracked	18,574
GRAND TOTAL	22	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Battelle Columbus Laboratories may be obtained by contacting:

Ray Lang
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2230, FAX 630-252-2654

Jim Eide
Battelle Columbus Laboratories
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Columbus, OH 43201
614-424-3785, FAX 614-424-3954

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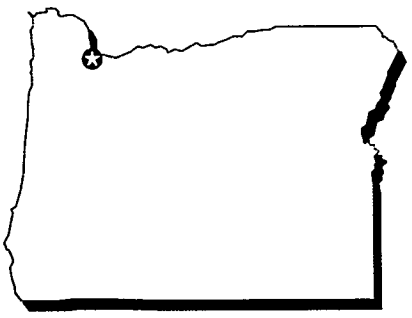
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Bonneville Power Administration



Bonneville Power Administration – 1994

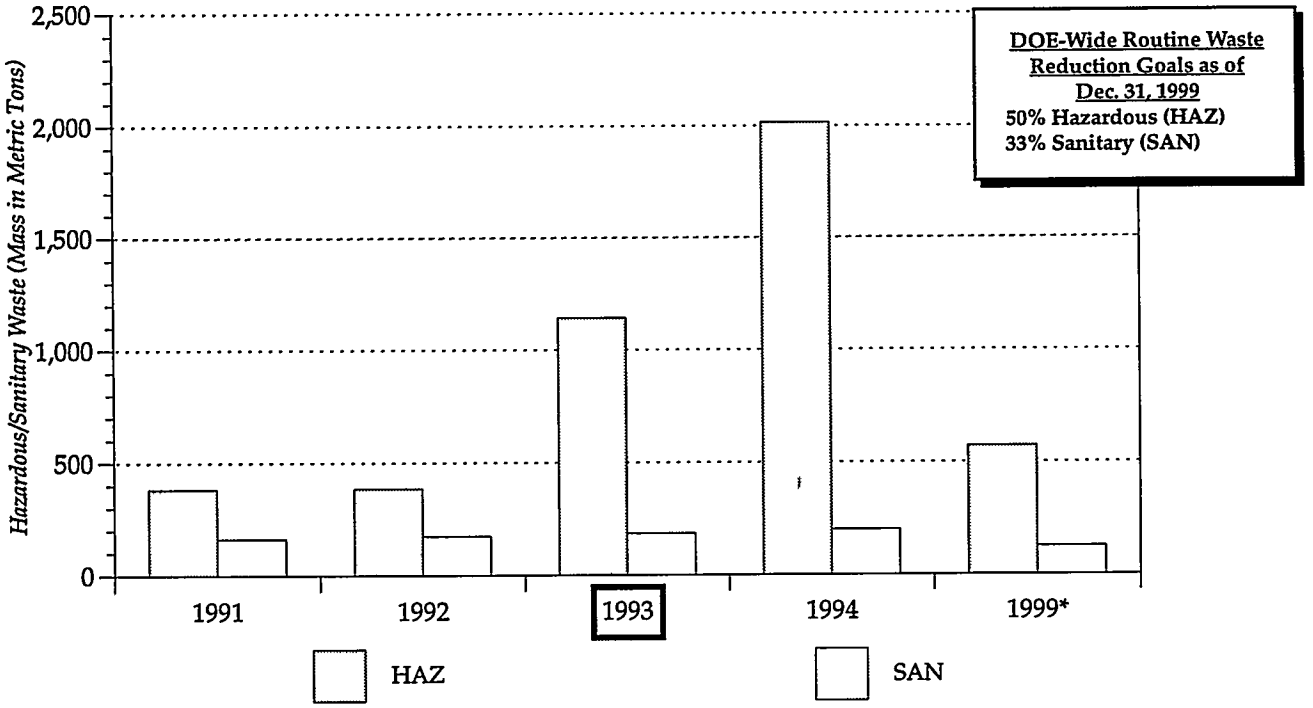
Location:	**Portland, Oregon**
Site Size:	**n/a**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Power Marketing Administration**
DOE Employees:	**3,271**
Prime Contractor Employees:	**0**

Facility Mission

The mission of the Bonneville Power Administration is to provide customers with a low-cost, reliable, and environmentally sound power supply and transmission system.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The Bonneville Power Administration implemented a program to ensure that all polychlorinated biphenyl-containing capacitors will be replaced by the year 2007. In 1994, 8,000 capacitors containing polychlorinated biphenyls were replaced with non-polychlorinated biphenyl capacitors at five Bonneville Power Administration sites.
- Containment was installed around large oil-filled equipment to reduce or eliminate the impact of potential oil spills on ground and surface water.
- Materials recycled include used tools, communication/automated data processing equipment, miscellaneous electrical equipment, and mercury.

Materials Recycled by the Bonneville Power Administration in 1994

Recycled Material	Bonneville Power Administration *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	36	1,420
Metals	1,823	21,797
Paper	232	14,486
Other Materials*	462	18,574
GRAND TOTAL	*2,553*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Bonneville Power Administration may be obtained by contacting:

Rebecca Redeker
Bonneville Power Administration
P.O. Box 3621-EPP
Portland, OR 97208-3621
503-230-7603, FAX 503-230-3314

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Waste Generation and Pollution Prevention Progress Fact Sheet

Brookhaven National Laboratory

Brookhaven National Laboratory – 1994

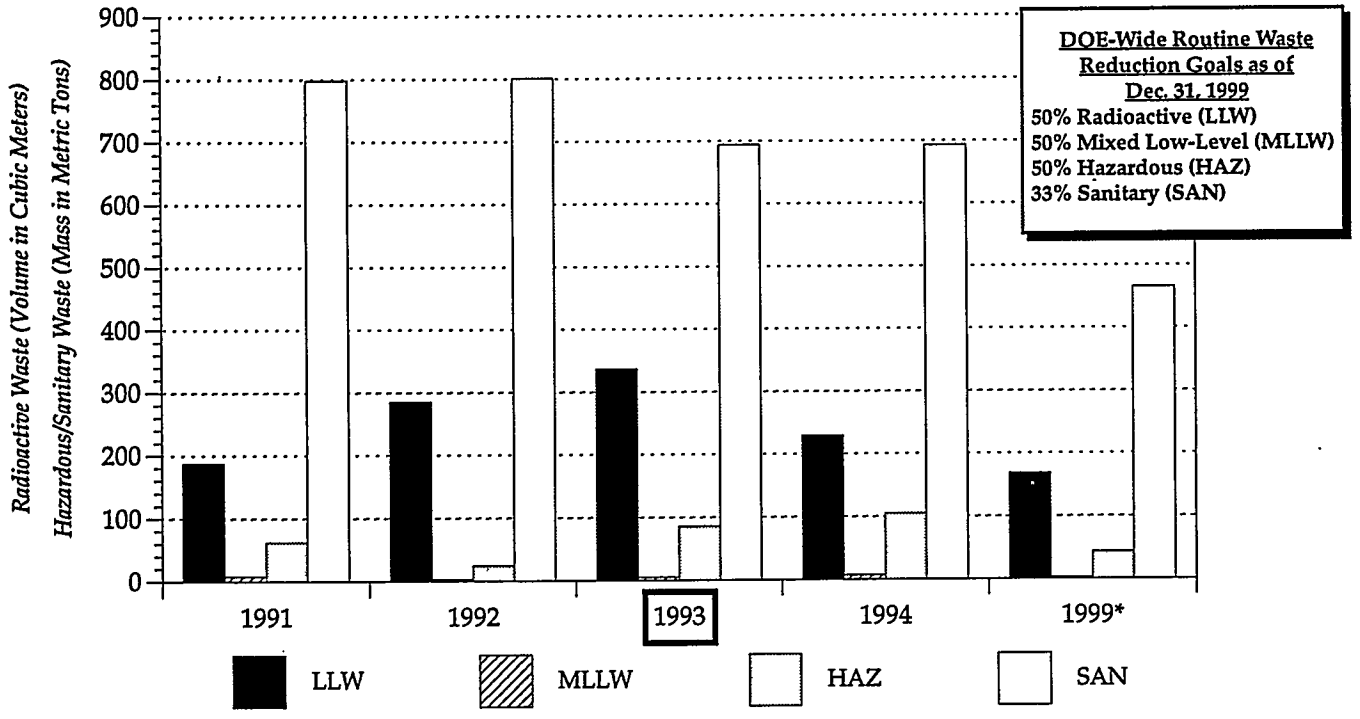
Location:	**Upton, New York**
Site Size:	**5,300 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**35**
Prime Contractor Employees:	**3,253**

Facility Mission

The Brookhaven National Laboratory is a multipurpose research and development laboratory. Its primary mission is to conceive, design, construct, and operate large, complex research facilities for fundamental scientific studies; and to manage basic and applied research in the physical, biomedical, and environmental sciences, and in selected energy technologies.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The restricted use of oil-based paints and the substitution of water-based latex paint reduced the quantity of paint and thinner waste generated by the cleanup of brushes, spray equipment, and spills.
- A motor vehicle maintenance program was implemented that reduced annual oil consumption by 675 gallons.
- All radiologically "clean" lead was sold as scrap metal, rather than storing it for future use.
- Wood and concrete construction debris was recycled.

Materials Recycled by the Brookhaven National Laboratory in 1994

Recycled Material	Brookhaven National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	25	1,420
Metals	35	21,797
Paper	249	14,486
Other Materials*	1,259	18,574
GRAND TOTAL	*1,568*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Brookhaven National Laboratory may be obtained by contacting:

Ray Lang
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2230, FAX 630-252-2654

Glen Todzia
Brookhaven National Laboratory
Building 445
Upton, NY 11973
516-344-7488, FAX 516-344-3223

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Waste Generation and Pollution Prevention Progress Fact Sheet

Energy Technology Engineering Center

Energy Technology Engineering Center – 1994

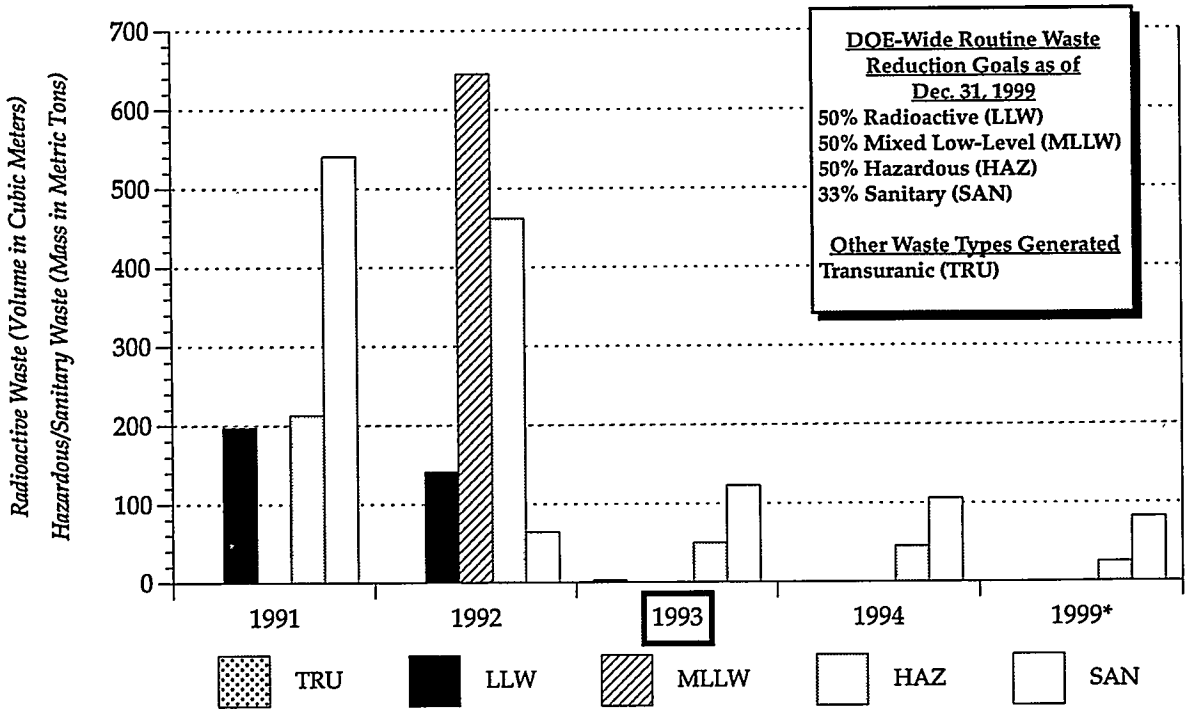
Location:	**Canoga Park, California**
Site Size:	**94 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Environmental Management**
DOE Employees:	**3**
Prime Contractor Employees:	**150**

Facility Mission

The Energy Technology Engineering Center is involved in the research, testing, and development of subsystems used in power generating facilities. Currently, the facilities are used to test nonnuclear systems and components for use in energy, power conversion, and liquid metal development programs. Environmental restoration, decommissioning, and waste minimization programs have been implemented to remediate the site.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type

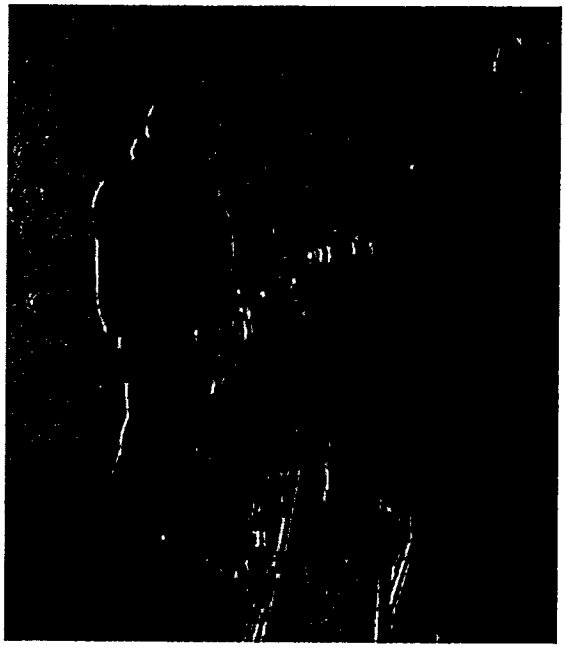


** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Approximately 250,000 pounds of lead from the Radioactive Materials Handling Facility (RMHF) was decontaminated using an ice blasting and chelation process.
- All hazardous waste containers in acceptable condition were reused.
- Successfully treated and disposed sodium contaminated components from the Sodium Disposal Facility site.
- Empty product drums were returned to the vendor for reuse.
- A self-cleaning cartridge prefilter system was installed in the ventilation system of Building 59 during decommissioning operations.
- Expect to recycle 100 metric tons of lead after decommissioning in 1995.



Off-the-shelf monitoring instrument was reengineered to be used for assessing activity of the fuel rod lines.

Materials Recycled by the Energy Technology Engineering Center in 1994

Recycled Material	Energy Technology Engineering Center *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	<0.5	1,420
Metals	26	21,797
Paper	6	14,486
Other Materials*	0	18,574
GRAND TOTAL	*32*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Energy Technology Engineering Center may be obtained by contacting:

Karin King
U.S. Department of Energy, Oakland Office
1301 Clay Street
Oakland, CA 94612-5208
510-637-1638, FAX 510-637-1646

Ravnesh Amar
Rocketdyne Division, Rockwell
6633 Canoga Ave., Dept. 022, MS-T038
Canoga Park, CA 91309
818-586-5243, FAX 818-586-5169

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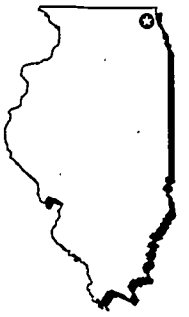
Waste Generation and Pollution Prevention Progress Fact Sheet

Fermi National Accelerator Laboratory



Fermi National Accelerator Laboratory – 1994

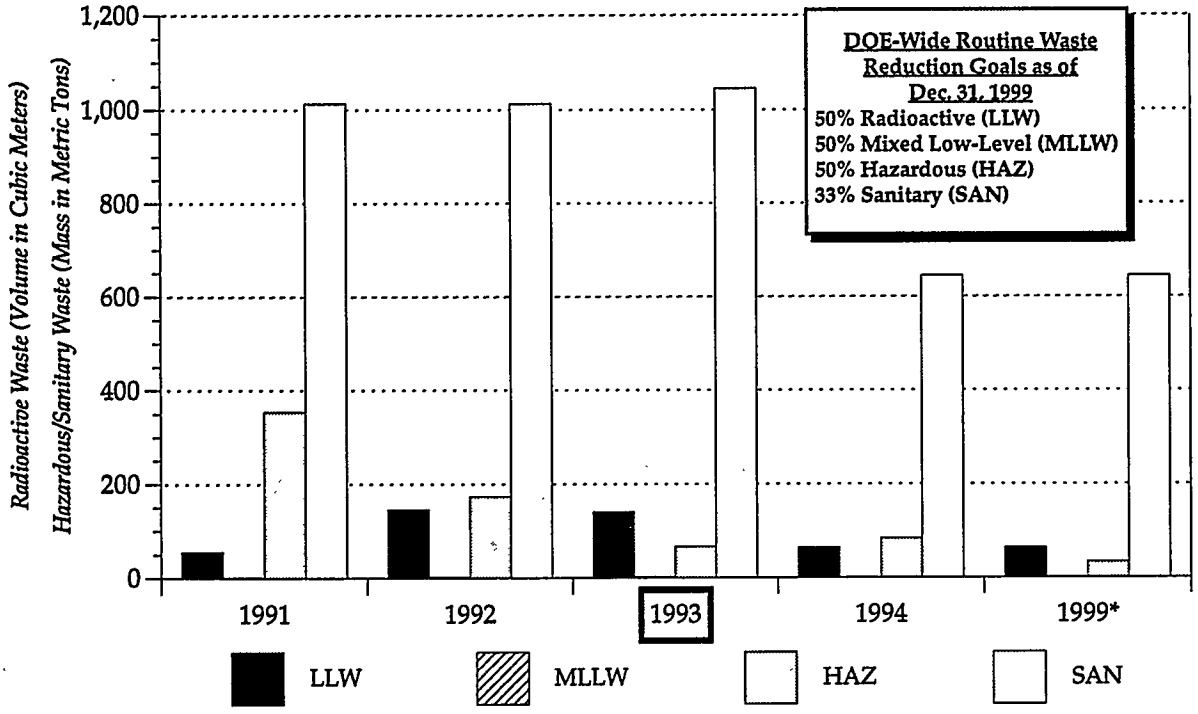
Location:	**Batavia, Illinois**
Site Size:	**6,800 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**15**
Prime Contractor Employees:	**2,100**

Facility Mission

The mission of the Fermi National Accelerator Laboratory is to conduct research in high-energy physics, acceleration and collision of subatomic particles, and interactions.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Low-level radioactive, low-level mixed, hazardous, and sanitary waste generation decreased in 1994.
- Chlorofluorocarbon emissions were reduced by changing Halon fire extinguishers to a manual setting, so that they would not automatically release Halon.
- The installation of recovery units on chillers reduced emissions of Freon 11.
- The elimination of hazardous materials in radiation areas reduced waste.
- Non-irradiated metals were separated from irradiated metals and sold as scrap along with other scrap metals, providing income to support additional employees.
- Scrap shielding materials were reused for new experiments.

Materials Recycled by the Fermi National Accelerator Laboratory in 1994

Recycled Material	Fermi National Accelerator Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	3	1,420
Metals	544	21,797
Paper	80	14,486
Other Materials*	2	18,574
GRAND TOTAL	*629*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Fermi National Accelerator Laboratory may be obtained by contacting:

Ray Lang
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2230, FAX 630-252-2654

Kenneth E. Isakson
Fermi National Accelerator Laboratory
P.O. Box 500
Batavia, IL 60510
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Fernald Environmental Management Project

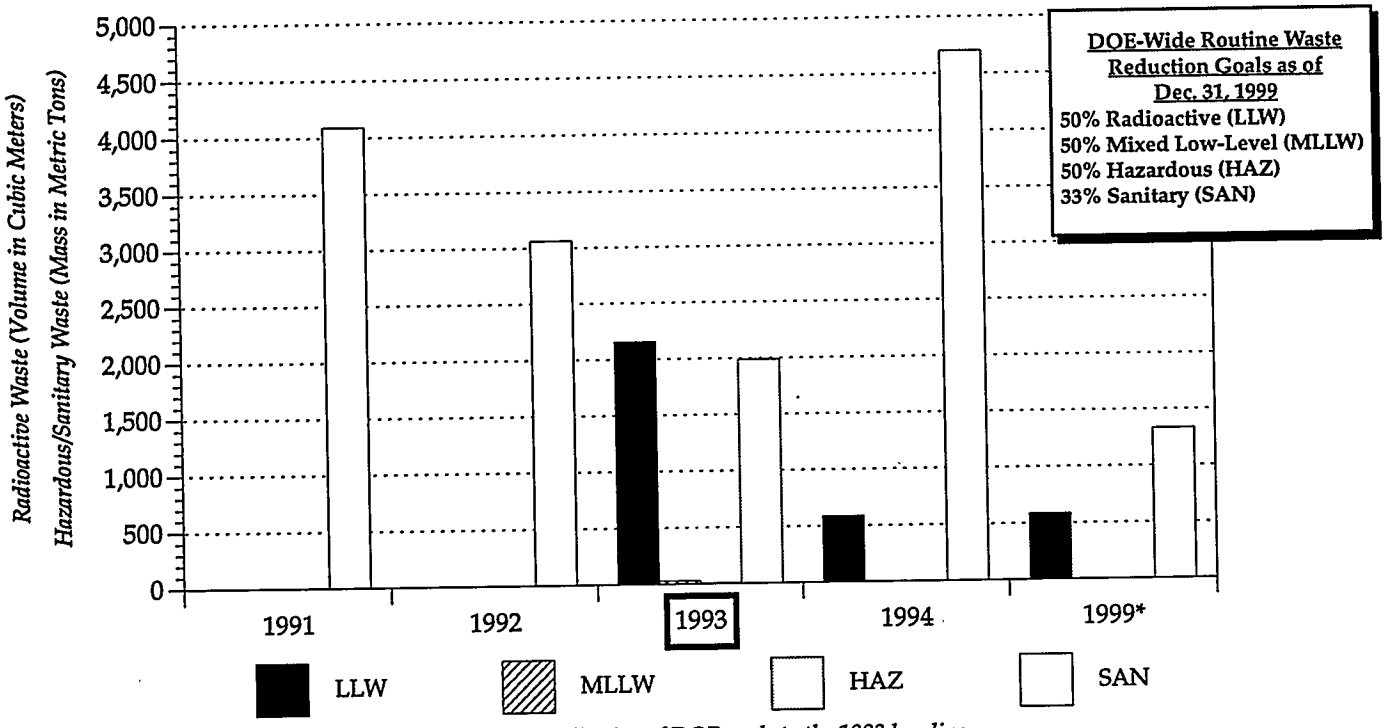
Fernald Environmental Management Project – 1994	
Location:	**Fernald, Ohio**
Site Size:	**1,050 Acres**
Operations Office:	**Ohio**
Lead Program Office:	**Environmental Management**
DOE Employees:	**50**
Prime Contractor Employees:	**2,423**

Facility Mission

The mission of the Fernald Environmental Management Project is to complete the remediation of the site in the most cost effective, safe, and timely manner, while addressing stakeholder concerns.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- A program was developed to inspect and transfer materials to reusable containers to eliminate low-level waste disposal from the "Radiologically Controlled Area."
- Established a reuse bulletin board for advertising surplus office equipment.
- The "Clean Area Trash Segregation Program" continued to expand, resulting in an estimated 50 percent reduction in low-level waste generation in 1994.
- EPA 2000 is being used as a non-hazardous chemical substitute for cleaning solvents. EPA 2000 contains citrus oils, leaves no residue, and when contaminated with uranium is not considered a mixed waste.
- The Material Release Facility successfully decontaminated 120 tons of carbon steel for free-release.
- Structural steel and floor decking were recycled.
- Non-contaminated, non-leaking light ballasts and light tubes were recycled.
- 1,295 printer toner cartridges were sent to a local refurbishing vendor for reuse.

Materials Recycled by the Fernald Environmental Management Project in 1994

Recycled Material	Fernald Environmental Management Project *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	112	21,797
Paper	8,023	14,486
Other Materials*	2	18,574
GRAND TOTAL	*8,137*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Fernald Environmental Management Project may be obtained by contacting:

Pete Yerace
U.S. Department of Energy, Fernald Area Office
P.O. Box 398705
Cincinnati, OH 45239-8705
513-648-3161, FAX 513-648-3076

Scott Osborn
Fernald Environmental Management Project
P.O. Box 538704, MS-51
Cincinnati, OH 45253-8074
513-648-5665, FAX 513-648-5701

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9/26/96-EM-gm240

Waste Generation and Pollution Prevention Progress Fact Sheet

Formerly Utilized Sites Remedial Action Program

Formerly Utilized Sites Remedial Action Program – 1994

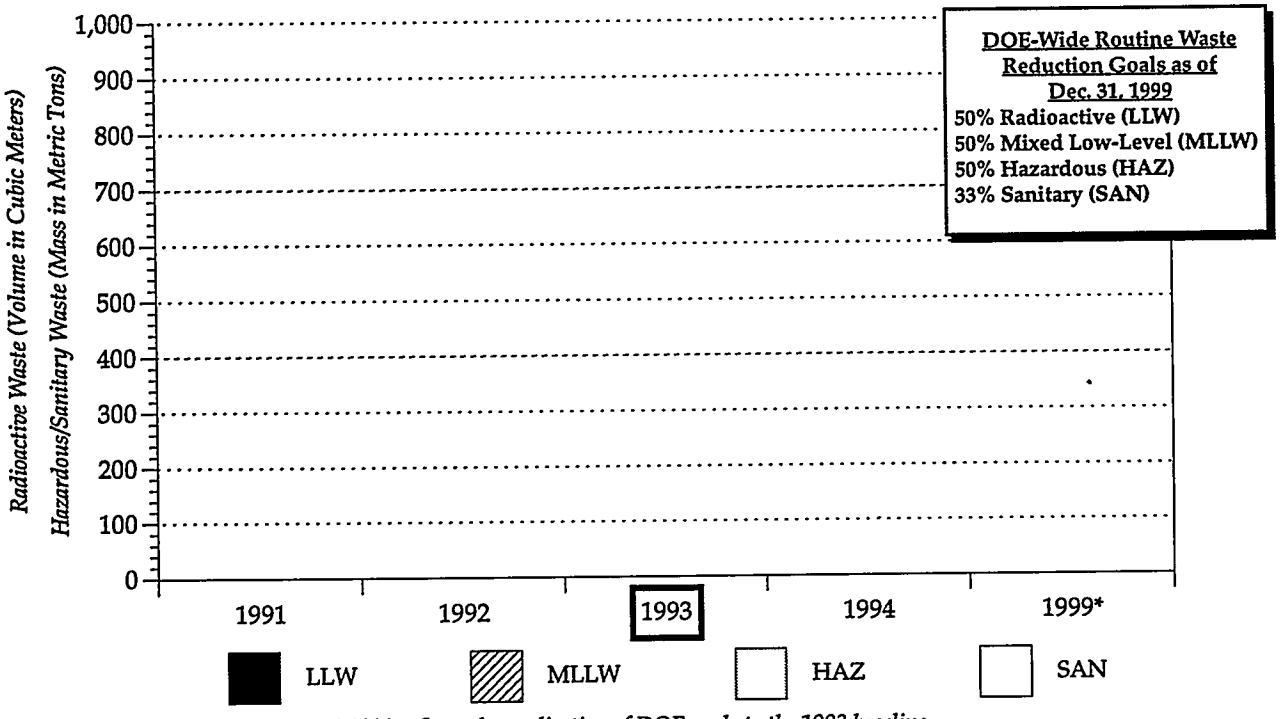
Location:	**Oak Ridge, Tennessee**
Site Size:	**n/a**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**14**
Prime Contractor Employees:	**288**

Facility Mission

The mission of the Formerly Utilized Sites Remedial Action Program is to identify, remediate, or otherwise control residual radioactive contamination produced by the Nation's atomic energy program or by commercial operations. To date, 46 sites in 14 States have been designated for cleanup, and remediation has been completed at 16 of those sites. All waste generated from 1991 through 1994 was reported as cleanup/stabilization. No routine waste was generated.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type

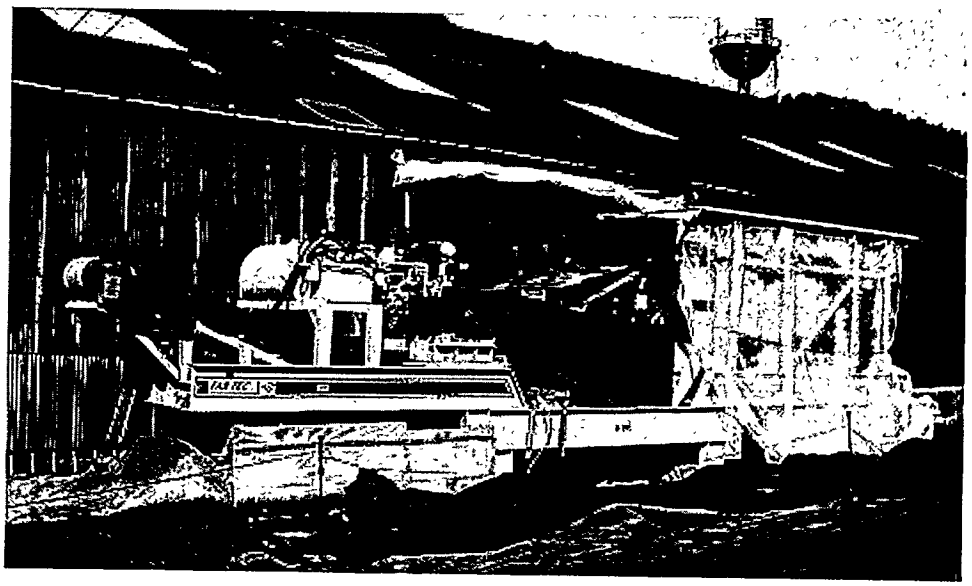


** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Radioactively contaminated personal protective clothing was incinerated to reduce disposal volume.
- A rock crusher was used to crush 550 metric tons of concrete and brick, which was subsequently sampled and placed onsite as clean backfill.
- Reuse of respirator cartridges at one site resulted in a 45 percent reduction in cartridge use.
- Materials recycled include aluminum cans, metal, and paper products.



Formerly Utilized Sites Remedial Action Program Rock Crusher

Materials Recycled by the Formerly Utilized Sites Remedial Action Program in 1994

Recycled Material	Formerly Utilized Sites Remedial Action Program *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	650	21,797
Paper	21	14,486
Other Materials*	550	18,574
GRAND TOTAL	*1,221*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Formerly Utilized Sites Remedial Action Program may be obtained by contacting:

Karen Catlett
U.S. Department of Energy Operations Office, Oak Ridge
EW-921, P.O. Box 2001
Oak Ridge, TN 37830
423-241-2224, FAX 423-576-5333

Jason Darby
Formerly Utilized Sites Remedial Action Program
P.O. Box 20001, MS-EW-93
Oak Ridge, TN 37831-8723
423-241-6343, FAX 423-576-0956

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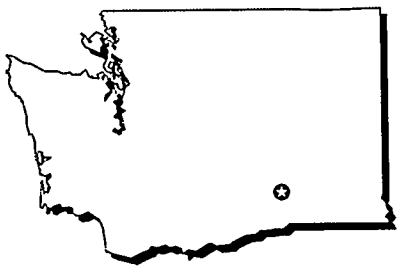
Waste Generation and Pollution Prevention Progress

Fact Sheet

Hanford Site



Hanford Site – 1994

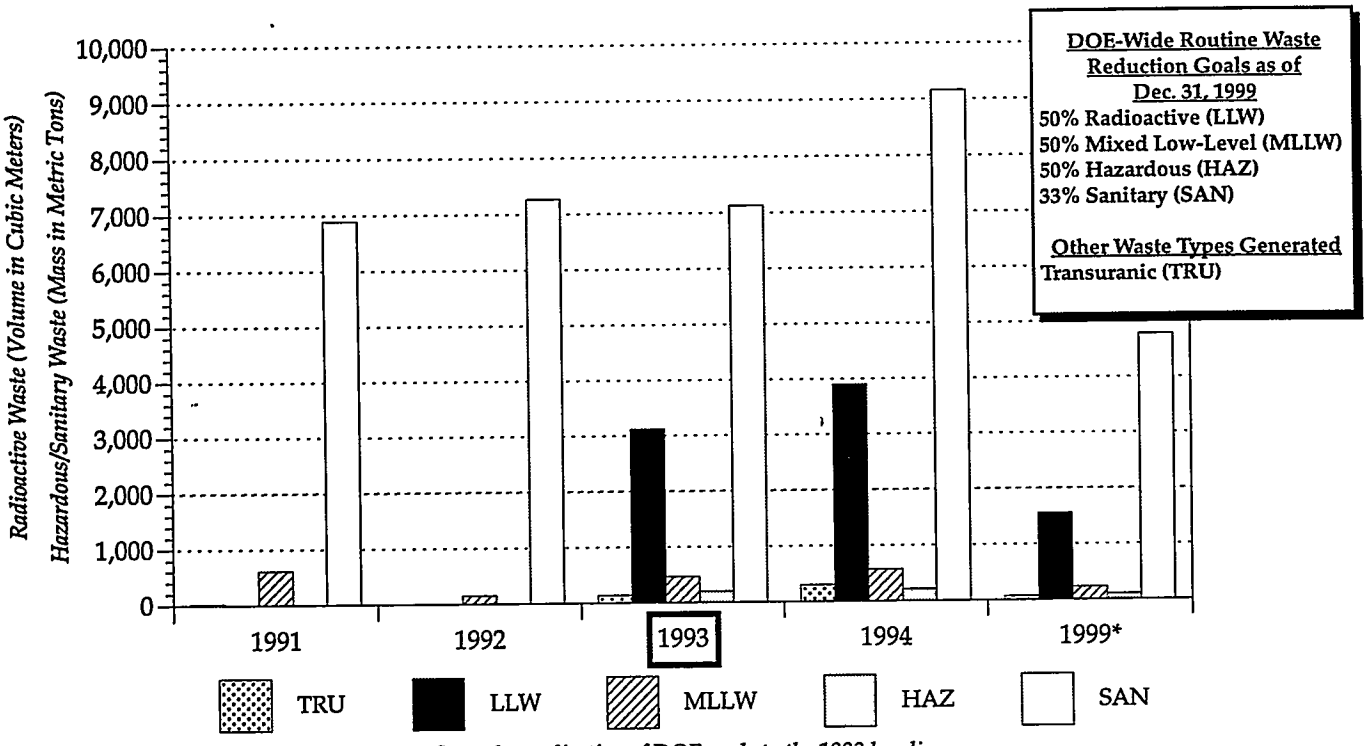
Location:	**Richland, Washington**
Site Size:	**358,000 Acres**
Operations Office:	**Richland**
Lead Program Office:	**Environmental Management**
DOE Employees:	**500**
Prime Contractor Employees:	**12,000**

Facility Mission

The primary mission of the Hanford Site is to cleanup the site through environmental remediation, deactivation, and decommissioning; provide scientific and technological excellence to meet global needs; and to partner in the economic diversification of the region. In the late 1980s, the Hanford Site ceased production and initiated its environmental restoration mission to deactivate and decommission the reactors and other contaminated site facilities, and cleanup the site's land. Activities included content characterization and decommissioning of 149 single shell storage tanks, treatment of 28 double shell tanks, safe disposal of spent nuclear fuel stored onsite (80 percent of the DOE complex inventory), removal of more than 500 buildings, and addressing significant solid waste, groundwater, and land restoration issues.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- In 1994, pollution prevention activities resulted in the reduction of 2,100 cubic meters of radioactive and mixed waste, approximately 274,000 kilograms of hazardous waste, 215,000 cubic meters of liquid waste and wastewater, and 14,500,000 kilograms of sanitary waste. Pollution prevention activities saved almost $4.2 million in disposal, product, and labor costs.
- The 340 Facility installed a process water supply system that eliminated the use of a stock tank and an internal-combustion engine to provide flushwater during railcar loading operations, eliminating approximately 400 liters of mixed waste per transfer.
- Energy conservation projects were implemented, including the replacement of transformers, lighting, motors, and compressors with energy efficient equipment.
- An electrical upgrade was performed at the 105-D, 105-DR, 105-F, and 105-H reactor buildings to allow lighting to be turned on and off as needed, instead of burning continuously.
- Gas cylinders, trucks, and railcars were decontaminated for reuse, saving disposal and equipment replacement costs.

Materials Recycled by the Hanford Site in 1994

Recycled Material	Hanford Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	126	1,420
Metals	2,060	21,797
Paper	629	14,486
Other Materials*	11,922	18,574
GRAND TOTAL	*14,737*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

- Two underground storage tanks were reused as burial containers for low-level radioactive waste instead of using new containers.
- Custodial Services reviewed its use of 168 hazardous cleaning products, and implemented the use of 38 safer substitutes.
- Alkaline batteries were replaced with rechargeable batteries.
- Materials recycled include concrete, building debris, scrap metals, wood, used antifreeze, hydraulic oil, Freon, liquid and solid chemicals, and fire extinguishers.

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Hanford Site may be obtained by contacting:

Ellen Dagan
U.S. Department of Energy, Richland Operations Office
2355 Stevens, MO-277, 200 East
Richland, WA 99352
509-376-3811, FAX 509-372-1926

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P.O. Box 1970, MS B3-28
Richland, WA 99352
509-372-1627, FAX 509-376-5560

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Idaho National Engineering Laboratory

Idaho National Engineering Laboratory – 1994

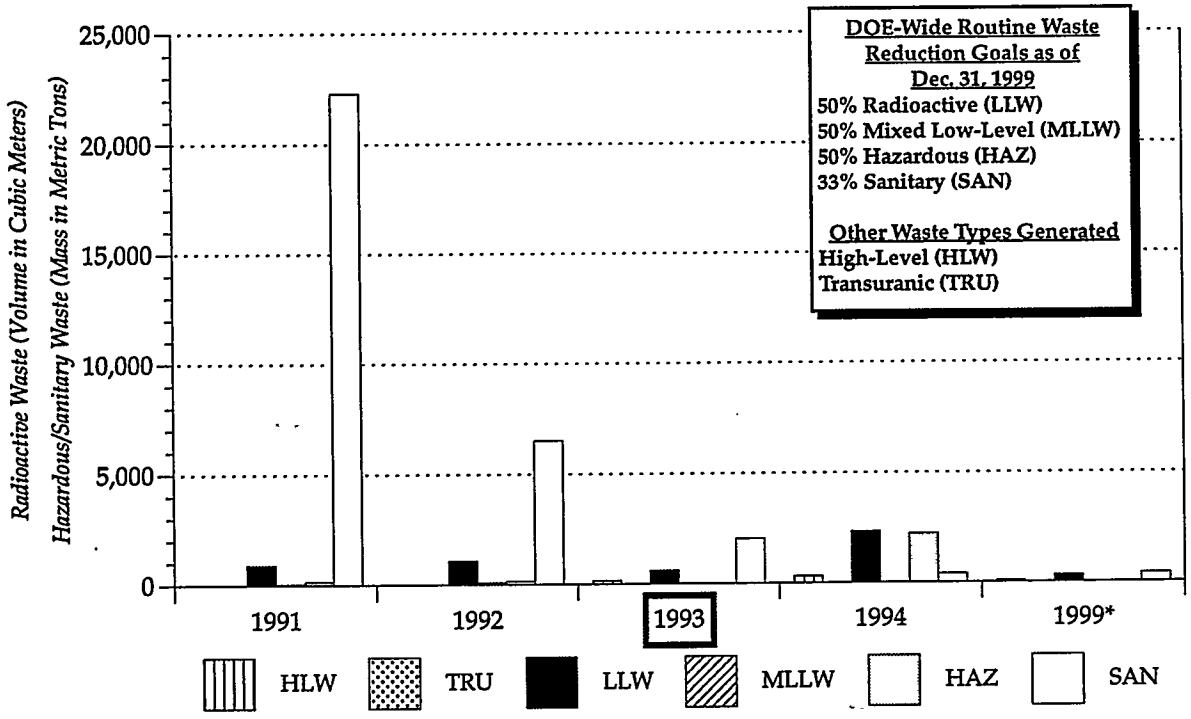
Location:	**Idaho Falls, Idaho**
Site Size:	**569,600 Acres**
Operations Office:	**Idaho**
Lead Program Office:	**Environmental Management**
DOE Employees:	**447**
Prime Contractor Employees:	**6,057**

Facility Mission

The primary mission of the Idaho National Engineering Laboratory is to apply its engineering and scientific capabilities to support national energy and defense programs. Programmatic activities include the development and testing of various energy technologies, management and operation of test reactors, and supervision of research and technical programs.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The Material Exchange Program logged 405 exchanges with an estimated cost savings of $242,000.
- A Pentex Scabbler was substituted for blasting media during paint stripping, which reduced waste volume by 97 percent.
- Developed and implemented a new plutonium analysis method that uses solid phase extraction to separate plutonium, eliminating the use of perchloric acid and the generation of 9,000 gallons of radioactive liquid waste per month.
- Softwall suspension tents were used for waste disposal, eliminating the disposal of approximately 90 percent of the original volume of waste. A softwall tent does not require decontamination before demolition, and can be reused as many as 11 times before disposal.
- Methylene chloride was captured and reused as a solvent in the analysis of semi-volatile organic compounds.

Materials Recycled by the Idaho National Engineering Laboratory in 1994

Recycled Material	Idaho National Engineering Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	69	1,420
Metals	15	21,797
Paper	255	14,486
Other Materials*	not tracked	18,574
GRAND TOTAL	*339*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

- Ethylene glycol, used as a heating/cooling media, was replaced by treated water. Approximately 4,000 gallons of ethylene glycol was recycled.
- Paper and cardboard recycling reduced sanitary waste generation in the Test Reactor Area by approximately 33 percent.
- Reused 4,755 gallons of contaminated cadmium borated waste flush solution at the Idaho Chemical Processing Plant Tank Farm as a substitute for boron in the calcination process. This resulted in a volume reduction of 100 percent.
- Materials recycled include toner cartridges, mercury batteries, wastes containing elemental mercury, nickel-cadmium batteries, silver, and ethylene glycol.

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Idaho National Engineering Laboratory may be obtained by contacting:

Laura Bingham
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785 DOE Place
Idaho Falls, ID 83402
208-526-7645, FAX 208-526-1405

John Griffin
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Idaho Falls, ID 83415-4110
208-526-6997, FAX 208-526-1458

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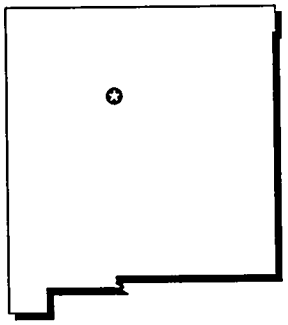
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Inhalation Toxicology Research Institute



Inhalation Toxicology Research Institute – 1994

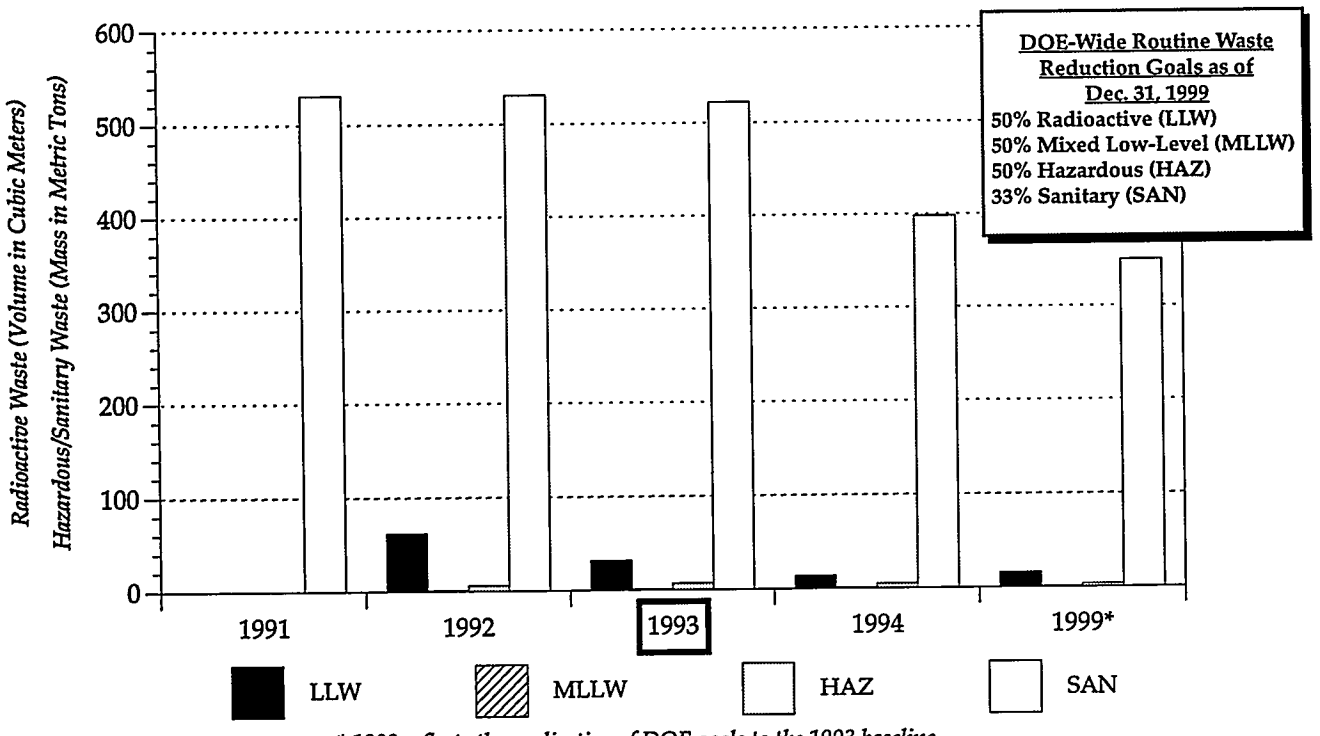
Location:	**Albuquerque, New Mexico**
Site Size:	**135 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Energy Research**
DOE Employees:	**0**
Prime Contractor Employees:	**160**

Facility Mission

The Inhalation Toxicology Research Institute performs research, education, and technology transfer activities. The Institute conducts research to identify human health risks, and works to develop techniques to maximize health and safety for energy workers and the public.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Non-Resource Conservation and Recovery Act regulated hazardous waste decreased 5,200 pounds.
- Low-level radioactive waste generation decreased 40 percent due to improvements in work practices, reduced radioisotope use, and the completion of a large decontamination project.
- A Chemical Tracking System was implemented to track 12,000 chemicals, which reduced the amount of chemicals purchased and reduced the amount of chemical waste.
- Ethylene glycol used by standby generators was replaced by propylene glycol, a less hazardous chemical.
- Water consumption was reduced by 15,000 gallons per day (5.5 million gallons per year) by recycling water used in detergent and acid wash cycles, reusing rinsewater for prewashing, installing closed loop cooling systems, installing a thermostat control on two diesel engines to regulate water flow, installing compressed air dryers to replace water cooled dryers, and installing automatic cooling tower blowdown controls.
- Materials recycled include white paper, computer paper, cardboard, newspaper, toner cartridges, scrap metal, kitchen grease, telephone books, and plastic.

Materials Recycled by the Inhalation Toxicology Research Institute in 1994

Recycled Material	Inhalation Toxicology Research Institute *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	1	1,420
Metals	<0.5	21,797
Paper	13	14,486
Other Materials*	2	18,574
GRAND TOTAL	*16*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Inhalation Toxicology Research Institute may be obtained by contacting:

Jocelyn Siegel
U.S. Department of Energy Operations Office, Albuquerque
P.O. Box 5400
Albuquerque, NM 87185-5400
505-845-4623, FAX 505-845-6286

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Albuquerque, NM 87185
505-845-1076, FAX 505-845-1198

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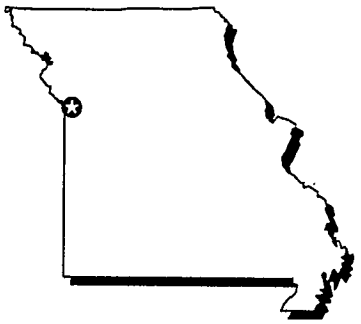
Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Kansas City Plant



Kansas City Plant – 1994

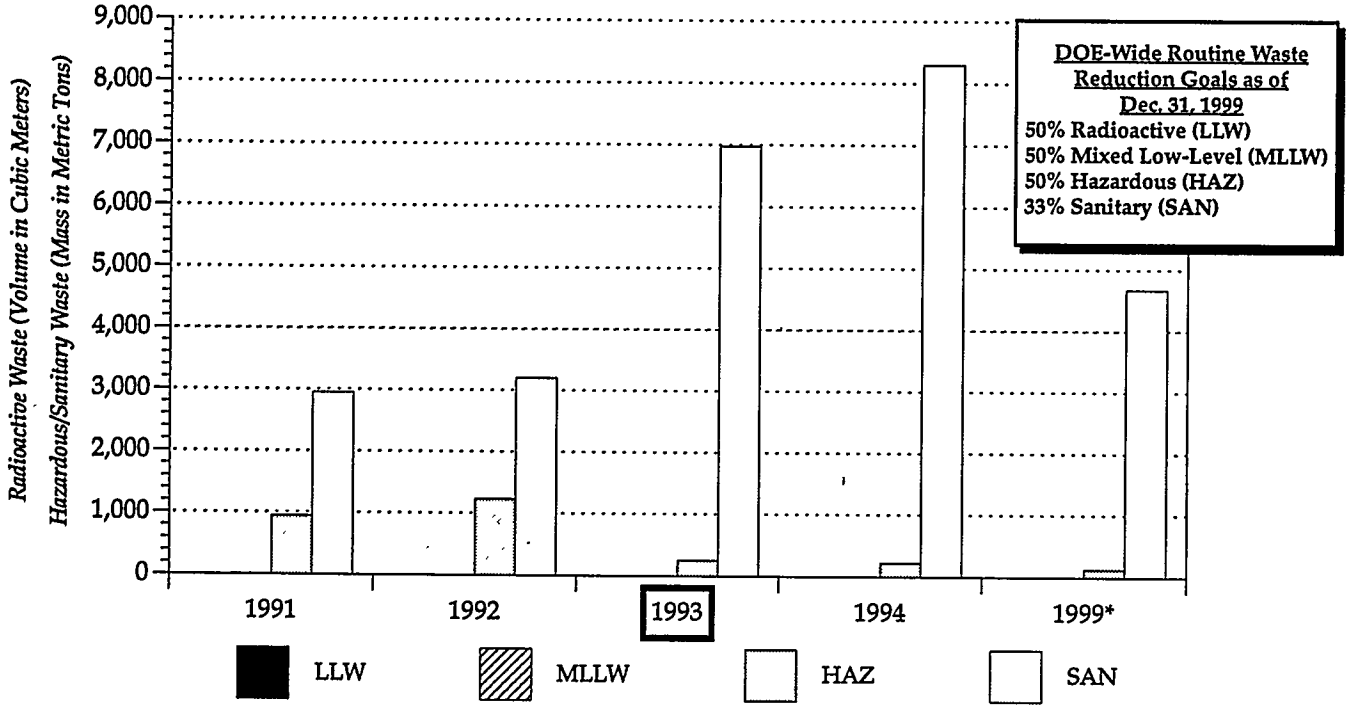
Location:	**Kansas City, Missouri**
Site Size:	**175 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**70**
Prime Contractor Employees:	**3,569**

Facility Mission

The mission of the Kansas City Plant is to produce and obtain nonnuclear electrical, electronic, electromechanical, mechanical, and plastic weapon components, and to transfer manufacturing technology to American businesses. Manufacturing operations are housed in 3.2 million square feet of building space, and involve machining, plastic fabrication, electronic fabrication, and electrical and mechanical assembly of nonnuclear components. Waste operations consist primarily of waste storage, offsite shipment and disposal of nonradioactive waste, and onsite wastewater pretreatment for nonradioactive industrial process wastewater.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The completion of the Abandoned Indian Creek Outfall project in 1993 decreased Toxic Substances Control Act (TSCA) regulated hazardous waste generation by 99.9 percent in 1994.
- TSCA regulated hazardous waste produced by construction activities decreased 54 percent in 1994 due to a reduction in the number of required building renovation projects.
- TSCA regulated polychlorinated biphenyl solid debris produced by building renovation activities decreased 33 percent in 1994 due to a reduction in renovation projects.
- Material substitutions reduced the generation of Resource Conservation and Recovery Act (RCRA) regulated hazardous waste by 17 percent in 1994.
- Because major remediation projects were completed in 1993, RCRA regulated hazardous waste generated by remediation projects decreased 94 percent in 1994.

Materials Recycled by the Kansas City Plant in 1994

Recycled Material	Kansas City Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	42	1,420
Metals	779	21,797
Paper	172	14,486
Other Materials*	19	18,574
GRAND TOTAL	*1,012*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

- EPA 33/50 Chemical Program emissions decreased 98 percent compared to 1988 levels due to the replacement of chlorinated solvent cleaning processes with aqueous cleaners and less toxic organic solvents.
- Machine coolants were processed to remove oil from the coolant, which reduced the oil/solvent wastestream from 31,013 gallons to 1,515 gallons.
- The hazardous chemicals Pumice Scrub Cleaner, Fremont 328, and Solder Conditioner PD-510 were eliminated at the site.
- Recycled materials include paper, scrap and precious metals, lumber, solvents, tires, printed circuit boards, toner cartridges, lead batteries, carbon, batteries, motors and transformers, X-ray paper, air filters, photographic film packaging, computers, corrugated fiberboard, and office supplies.

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Kansas City Plant may be obtained by contacting:

Jocelyn Siegel
U.S. Department of Energy Operations Office, Albuquerque
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Albuquerque, NM 87185-5400
505-845-4623, FAX 505-845-6286

Bill Schlosberg
Allied Signal, Inc. & FM+T
P.O. Box 419159, D/SE2, MS-BC30
Kansas City, MO 64141-6159
816-997-3673, FAX 816-997-4208

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Waste Generation and Pollution Prevention Progress Fact Sheet

Lawrence Berkeley National Laboratory

Lawrence Berkeley National Laboratory – 1994

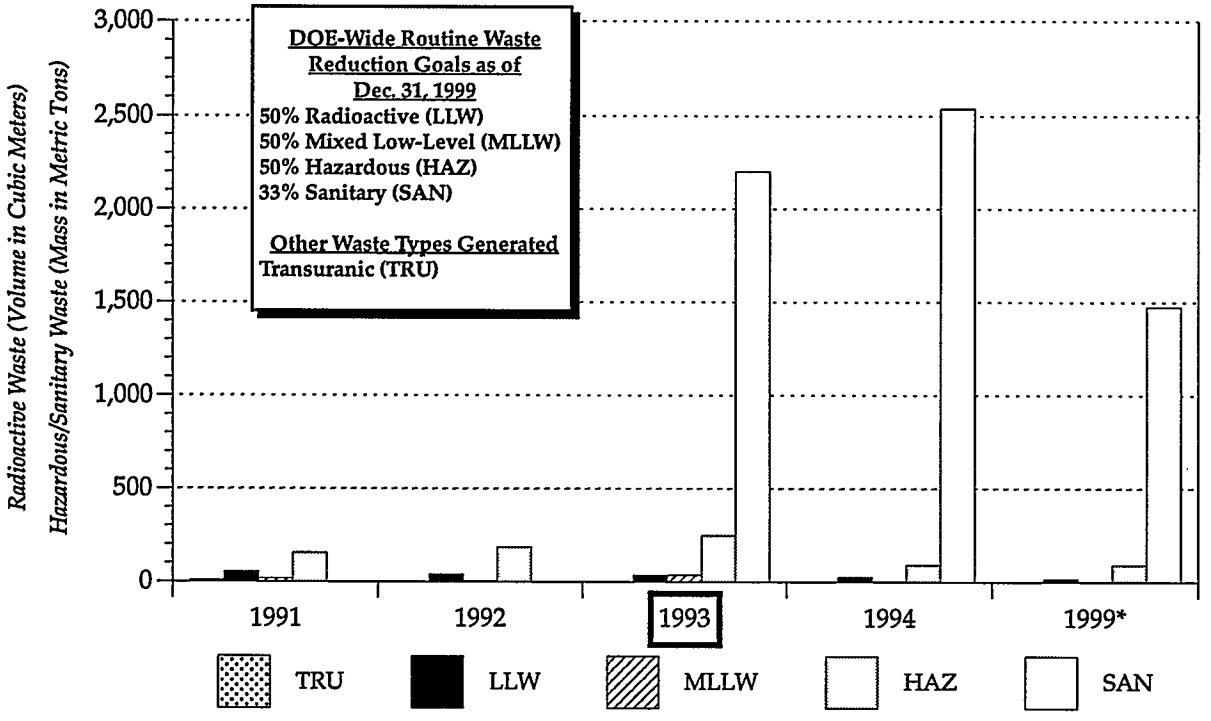
Location:	**Berkeley, California**
Site Size:	**140 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Energy Research**
DOE Employees:	**10**
Prime Contractor Employees:	**3,400**

Facility Mission

The primary mission of the Lawrence Berkeley National Laboratory is to serve the nation and its scientific and educational communities through energy-related research programs at its unique facilities. The Laboratory performs leading multi-disciplinary research in energy, general, and life sciences; develops and operates unique national experimental facilities for use by qualified investigators; educates and trains future generations of scientists and engineers; and fosters productive relationships between Lawrence Berkeley National Laboratory research programs and industry.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Shielding blocks from the Lawrence Berkeley National Laboratory were reused at the Brookhaven National Laboratory, eliminating 4,250 cubic meters of low-level waste. In addition, this reuse saved burial space, and avoided the need to construct new shielding materials. The remaining excess shielding blocks are being evaluated for use in decommissioning activities at Chernobyl, along with several other alternatives.
- A closed-loop rinsewater separation and recycling process was designed for the printed circuit board manufacturing process, which reduced acidic wastes by approximately 7,300 gallons.
- Machine shop coolant was recovered and reused, and by refining operational procedures and conditions, coolant waste was reduced 32.4 percent.
- By characterizing abrasive sand waste, the sandblasting shop was able to eliminate approximately 3,200 pounds (four 55-gallon drums) of waste sand.
- The main photochemical operation converted a wet photographic process to a digital process, eliminating 5.6 cubic meters of photochemical waste.
- Approximately 125,000 linear feet of fluorescent light bulbs were recycled.
- A glass segregation recycling program was implemented in 1994.

Materials Recycled by the Lawrence Berkeley National Laboratory in 1994

Recycled Material	Lawrence Berkeley National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	387	21,797
Paper	not tracked	14,486
Other Materials*	1	18,574
GRAND TOTAL	*388*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Lawrence Berkeley National Laboratory may be obtained by contacting:

Karin King
U.S. Department of Energy, Oakland Office
1301 Clay Street
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Waste Generation and Pollution Prevention Progress Fact Sheet

Lawrence Livermore National Laboratory

Lawrence Livermore National Laboratory – 1994

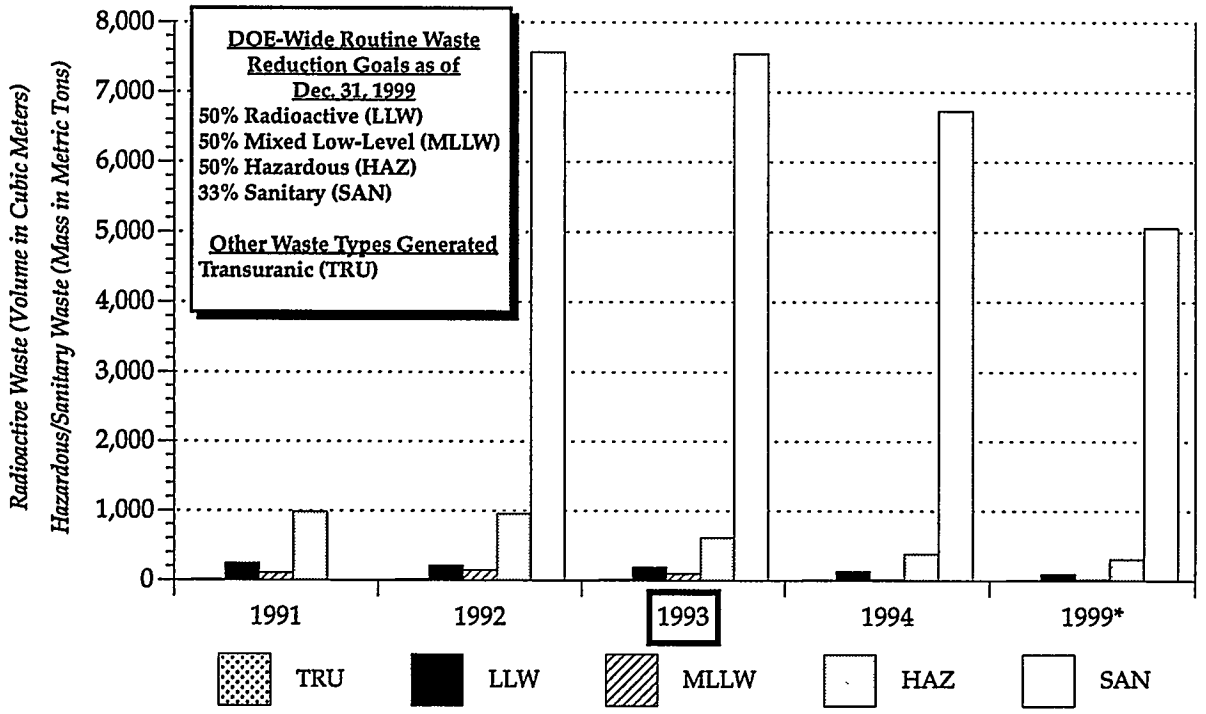
Location:	**Livermore, California**
Site Size:	**7,821 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Defense Programs**
DOE Employees:	**154**
Prime Contractor Employees:	**8,000**

Facility Mission

The mission of the Lawrence Livermore National Laboratory is to research, test, and develop projects focusing on national defense and security, energy, the environment, biomedicine, economic competitiveness, and science education.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- DOE and the Lawrence Livermore National Laboratory jointly selected three of the five process wastestreams that produced the largest waste volumes in 1993, and a five percent reduction goal per year was established for these processes. In 1994, reductions of 18 to 30 percent were achieved for these wastestreams. Gravel and debris from the firing tables declined 19 percent (from 105 to 85 tons); machine shop coolant declined 18 percent (from 36 to 29.5 tons); and aqueous waste from paint shops declined 30 percent (from 13 to nine tons).
- Photochemical waste was reduced by consolidating operations and increasing the use of digital processing technologies.
- Gravel was separated from debris for reuse at the firing tables after it is "washed" and reconditioned.
- A micro separator was installed to remove paint solids from recirculating water in the spray booth.
- Nonchlorinated, nonpetroleum-based solvents have replaced 1,1,1 trichloroethane in the printed circuit board manufacturing process.

Materials Recycled by the Lawrence Livermore National Laboratory in 1994

Recycled Material	Lawrence Livermore National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	46	1,420
Metals	1,081	21,797
Paper	335	14,486
Other Materials*	874	18,574
GRAND TOTAL	*2,336*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furnitureloffice equipment, fly ash, and high explosives.*

- Aqueous cleaning has replaced Freon degreasing in the printed circuit board shop.
- An ultrasonic unit and aqueous cleaning system have replaced a vapor degreaser used in the electronics fabrication facility.
- Metal plating rinse water is recovered using "cold evaporation" and is reused within the facility.
- Machine shop coolant is recovered by a distillation unit and reused.
- Recycling programs were expanded to include scrap metal, computers, cardboard, wood, paper, toner cartridges, light ballasts, lacquer thinners, acetone, etching fluids, methylene chloride, spent acids, spent coolant, alkaline cleaner bath, newspaper and magazines, video tapes, diesel fuel, fluorescent light tubes, oil and batteries, and other hardware.

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Lawrence Livermore National Laboratory may be obtained by contacting:

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1301 Clay Street
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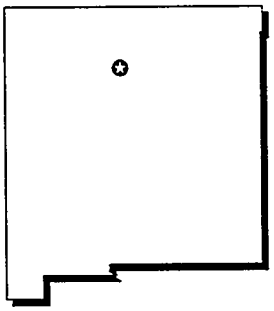
Waste Generation and Pollution Prevention Progress Fact Sheet

Los Alamos National Laboratory



Los Alamos National Laboratory – 1994

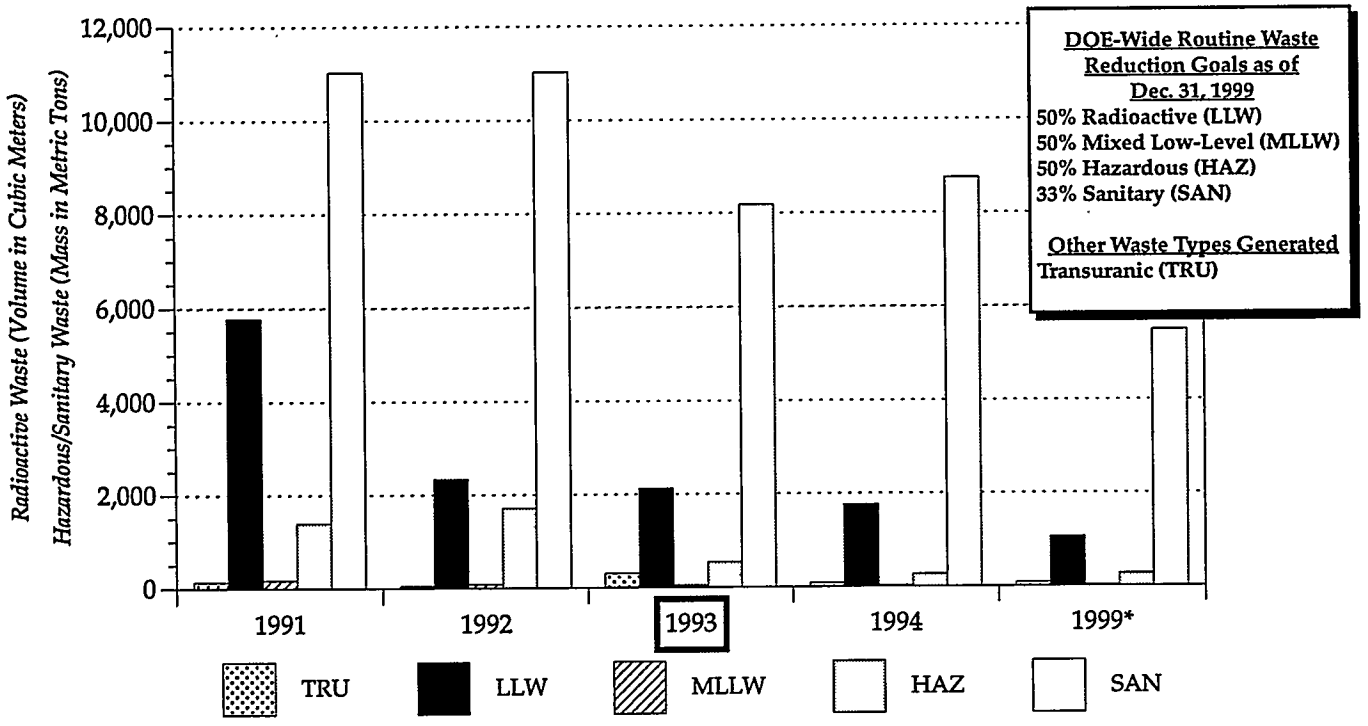
Location:	**Los Alamos, New Mexico**
Site Size:	**27,520 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**80**
Prime Contractor Employees:	**7,163**

Facility Mission

The mission of the Los Alamos National Laboratory continues to focus on national defense, but it has been broadened to include research in medium-energy physics, space nuclear systems, controlled thermonuclear fusion, lasers, nuclear safeguards, space physics, biomedicine, computational science, material science, and environmental management. Because of its position between academic and industrial research, the Los Alamos National Laboratory has an important role in expediting the development and commercialization of emerging technologies.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- By modifying the construction design for facility upgrades, 6,400 cubic yards of soil excavated from the site was reused, saving $15 million in costs.
- Material substitution has enabled the Los Alamos National Laboratory to reduce its annual trichloroethylene use from 2,200 pounds to 250 pounds.
- The steam plant was replaced by package boilers, reducing nitrous oxide from 171 to 23 tons/year, sulfur oxides from one to 0.4 tons/year, particulate matter from 17 to seven tons/year, carbon dioxide from 43 to 23 tons/year, and volatile organic compounds from three to two tons/year.
- Radio Frequency-Driven Oxygen Plasma was used to clean manufactured parts, eliminating the traditional toxic solvents used to remove hydrocarbon-based contaminants such as grease, oil, and cutting fluids.
- Excavated oils containing lead, copper, and zinc removed from an inactive firing range were reused.
- Automotive parts such as radiators, alternators, starters, and hydraulic cylinders were rebuilt instead of purchasing replacements.
- A microfiche film processor was retrofitted to reduce the volume and toxicity of photographic wastes.
- High-pressure, low-volume paint guns were used to reduce volatile organic compounds, paint usage, and waste.
- Hydrochloric acid was replaced by a less hazardous solvent.
- Sulfuric acid was replaced by carbon dioxide to neutralize boiler blowdown water before release to the environment.
- Gaseous chlorine was replaced by a less hazardous bromine-chlorine granulated solid at the power plant.
- Ethanol was replaced by a nonhazardous solvent for ion pump cleaning in Building MPF-2.
- Acid scrub was replaced by a new electrolytic decontamination method.
- Materials recycled include used toner cartridges, coolant, oil drums, ethylene glycol, boron, stainless and carbon steel.

Materials Recycled by the Los Alamos National Laboratory in 1994

Recycled Material	Los Alamos National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	24	1,420
Metals	550	21,797
Paper	293	14,486
Other Materials*	151	18,574
GRAND TOTAL	*1,018*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Los Alamos National Laboratory may be obtained by contacting:

Jocelyn Siegel
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P.O. Box 5400
Albuquerque, NM 87185-5400
505-845-4623, FAX 505-845-6286

Tom Starke
Los Alamos National Laboratory
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Los Alamos, NM 87545
505-667-6639, FAX 505-665-8118

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Waste Generation and Pollution Prevention Progress

Fact Sheet

Mound Plant

Mound Plant – 1994

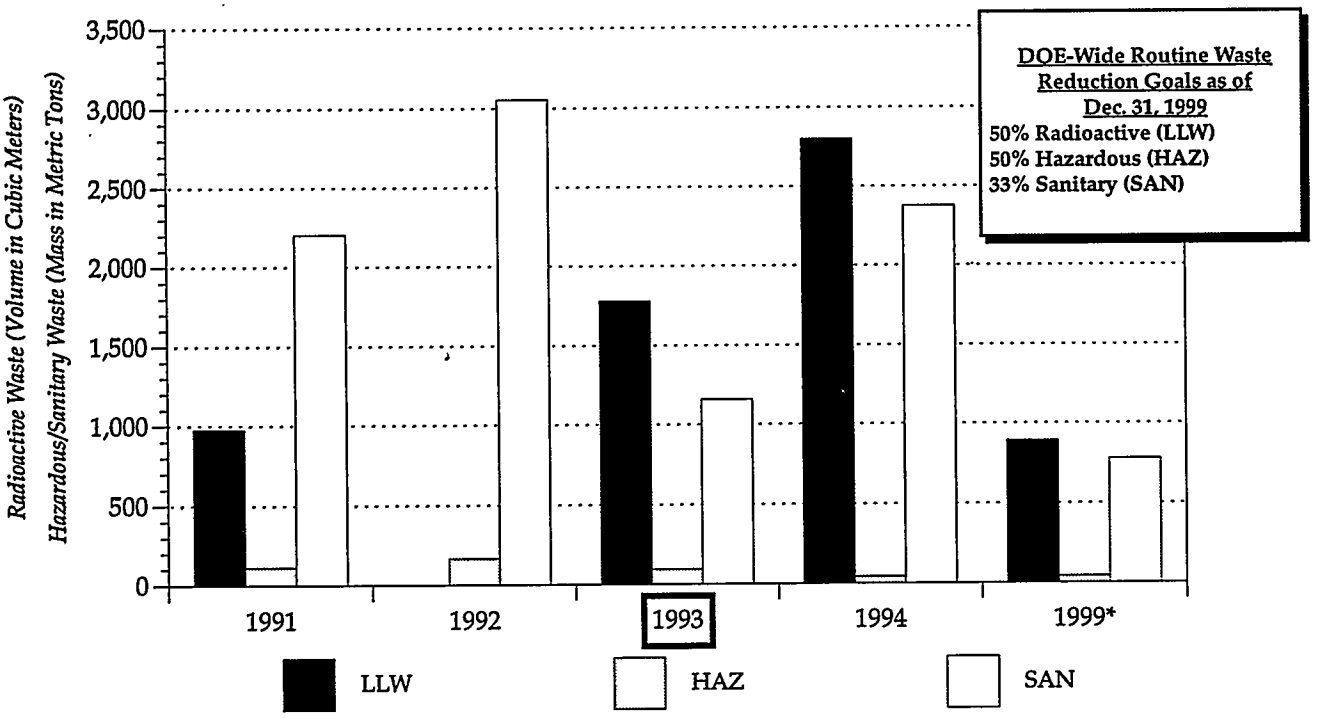
Location:	**Miamisburg, Ohio**
Site Size:	**306 Acres**
Operations Office:	**Ohio**
Lead Program Office:	**Environmental Management**
DOE Employees:	**131**
Prime Contractor Employees:	**1,100**

Facility Mission

The primary mission of the Mound Plant is environmental management. Activities include environmental restoration, decommissioning, and waste management.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Implemented an in situ Bioremediation Treatment System Facility to treat organically contaminated onsite soils, which avoided 1,500 cubic yards of waste.
- Implemented a chemical reuse program.
- Glass recycling was implemented in the cafeteria.

Materials Recycled by the Mound Plant in 1994

Recycled Material	Mound Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	2	1,420
Metals	31	21,797
Paper	25	14,486
Other Materials*	1	18,574
GRAND TOTAL	*59*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furnitureloffice equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Mound Plant may be obtained by contacting:

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Miamisburg, OH 45343-3020
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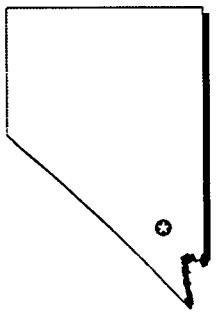
Waste Generation and Pollution Prevention Progress

Fact Sheet

Nevada Test Site



Nevada Test Site – 1994

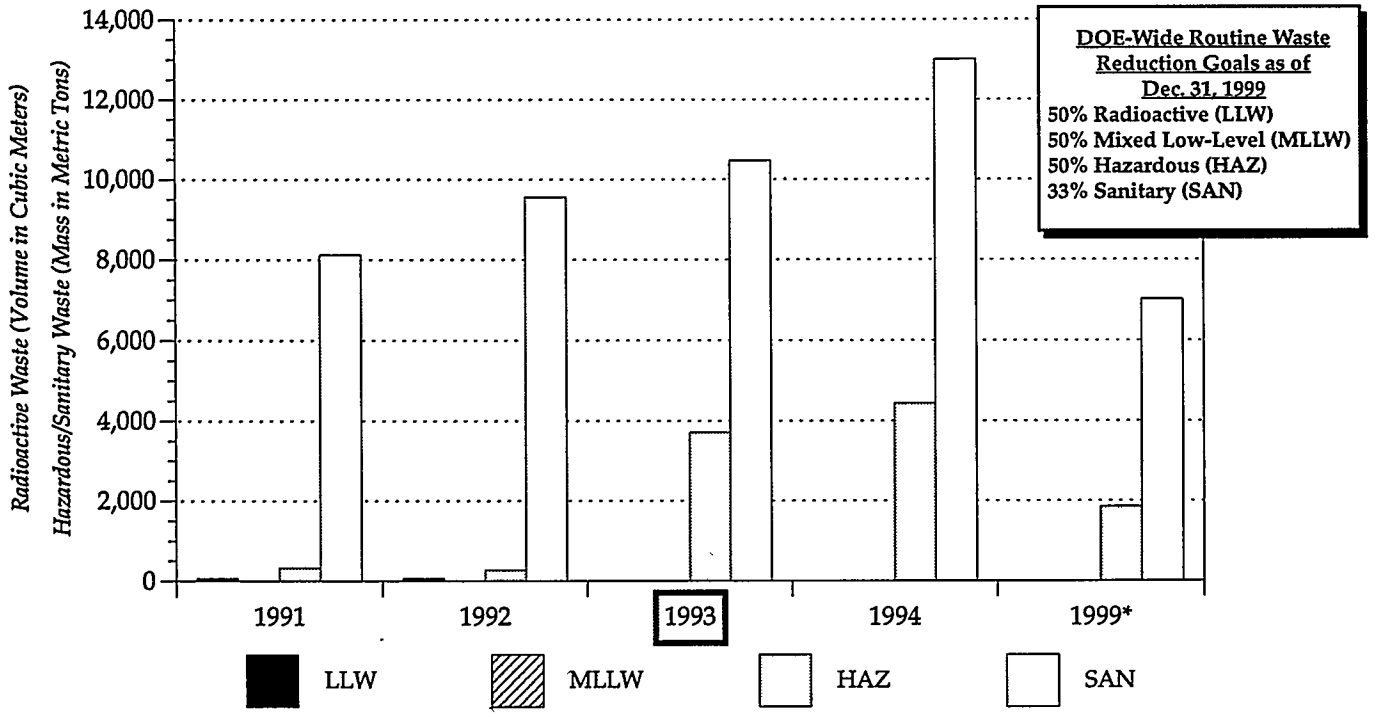
Location:	**Mercury, Nevada**
Site Size:	**864,000 Acres**
Operations Office:	**Nevada**
Lead Program Office:	**Defense Programs**
DOE Employees:	**34**
Prime Contractor Employees:	**1,129**

Facility Mission

The Nevada Test Site is responsible for maintaining nuclear testing capability, supporting science-based Stockpile Stewardship experiments, maintaining nuclear agency response capability, applying environmental restoration techniques to areas affected by nuclear testing, managing low-level and mixed radioactive waste, investigating demilitarization technologies, investigating counter-proliferation technologies, supporting work-for-others programs and special Department of Defense activities, operating a hazardous materials spill test center, and providing for the commercial development of the site.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- In 1994, 264,000 pounds of oil was sent to a reclamation facility for recovery and reuse.
- Spent lead bullets were recycled.

Materials Recycled by the Nevada Test Site in 1994

Recycled Material	Nevada Test Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	688	1,420
Metals	2,764	21,797
Paper	302	14,486
Other Materials*	0	18,574
GRAND TOTAL	*3,754*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Nevada Test Site may be obtained by contacting:

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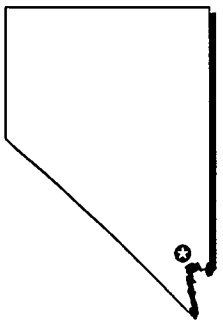
Waste Generation and Pollution Prevention Progress Fact Sheet

North Las Vegas Facility



North Las Vegas Facility – 1994

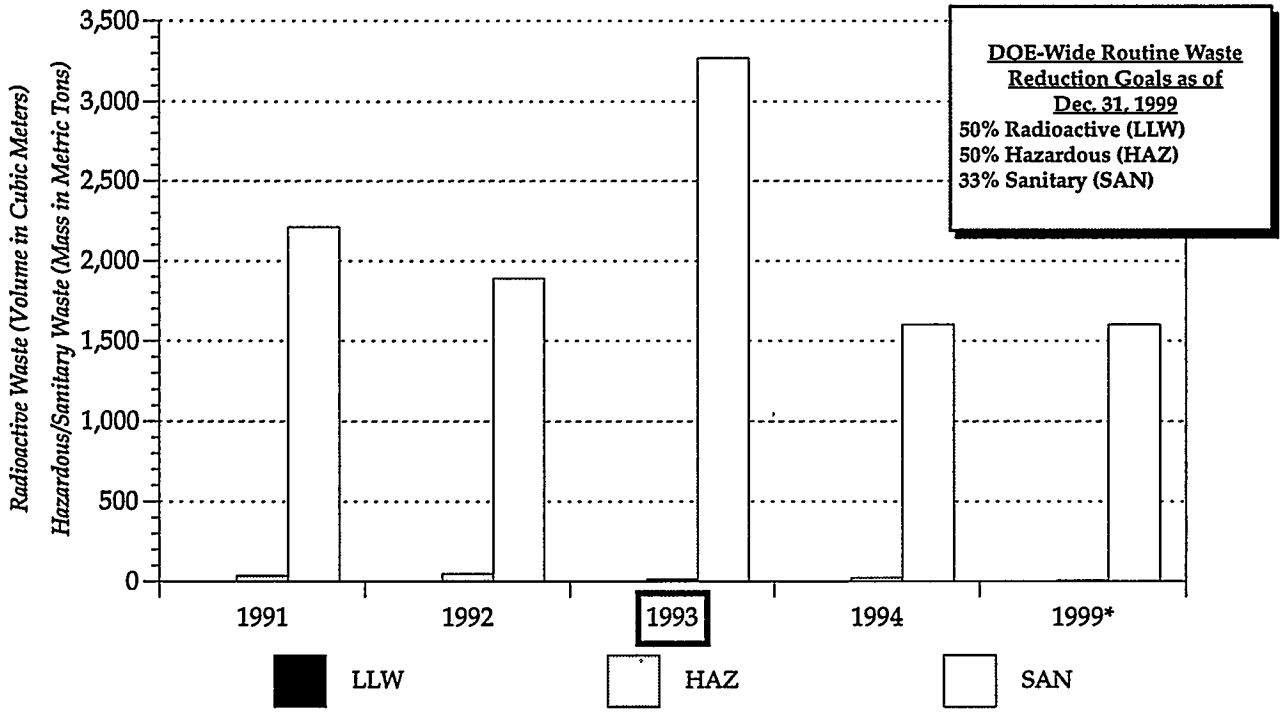
Location:	**North Las Vegas, Nevada**
Site Size:	**126.5 Acres**
Operations Office:	**Nevada**
Lead Program Office:	**Defense Programs**
DOE Employees:	**61**
Prime Contractor Employees:	**1,265**

Facility Mission

The primary mission of the North Las Vegas Facility is to provide support to maintain nuclear testing capabilities, support Stockpile Stewardship experiments, maintain nuclear emergency response capability, investigate counter-proliferation technologies, support "work-for-others" programs, and provide for commercial development of the site.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Materials recycled include paper, cardboard, aluminum cans, scrap metal, copper, lead, oil, and jet fuel.

Materials Recycled by the North Las Vegas Facility in 1994

Recycled Material	North Las Vegas Facility *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	4	1,420
Metals	265	21,797
Paper	166	14,486
Other Materials*	20	18,574
GRAND TOTAL	*455*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the North Las Vegas Facility may be obtained by contacting:

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Waste Generation and Pollution Prevention Progress

Fact Sheet

Oak Ridge K-25 Site

Oak Ridge K-25 Site – 1994

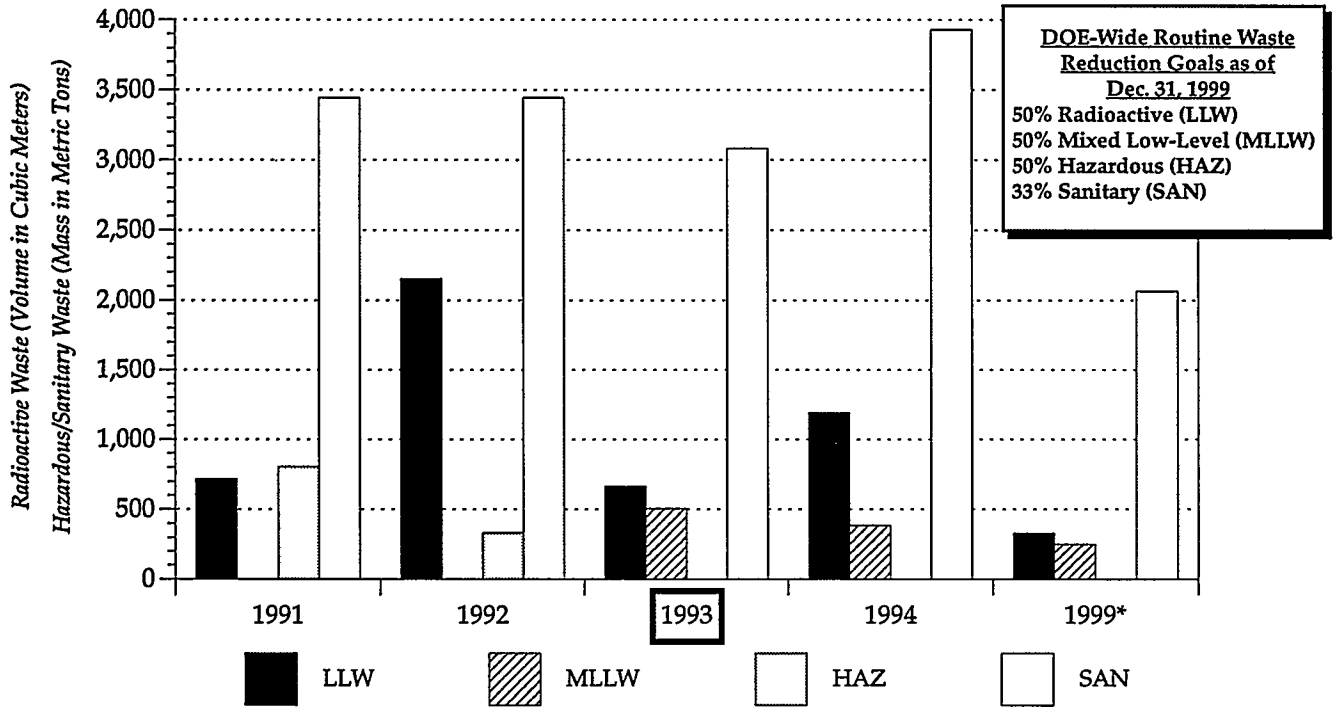
Location:	**Oak Ridge, Tennessee**
Site Size:	**706 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**15**
Prime Contractor Employees:	**4,127**

Facility Mission

The primary mission of the Oak Ridge K-25 Site is to support DOE's environmental management program. The Oak Ridge K-25 Site, designated as the Center for Environmental Technology and the Center for Waste Management in May 1993, is the central location for the Oak Ridge Reservation's environmental restoration and waste management program.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The Oak Ridge K-25 Site successfully reduced the generation of routine low-level waste solids by 50 percent, and routine mixed low-level waste liquids by 39 percent in 1994.
- A condensate polisher was installed at the Steam Plant, which reduced Resource Conservation and Recovery Act regulated hazardous process wastewater by 3,430 cubic meters each year.
- Freon was captured and reused, reducing coolant purchases and air emissions.
- Various generators of photographic waste solutions installed in-process silver recovery units, which captured more than 95 percent of this wastestream.
- A high-pressure water washing unit was installed to recycle water used to clean engines, vehicles, and parts.
- Oil-based inks were replaced by soy-based inks.
- Office paper recycling increased 30 percent and tire recycling increased 34 percent in 1994. Lead, phone books, and batteries were also recycled.

Materials Recycled by the Oak Ridge K-25 Site in 1994

Recycled Material	Oak Ridge K-25 Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	47	1,420
Metals	627	21,797
Paper	367	14,486
Other Materials*	0	18,574
GRAND TOTAL	*1,041*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Oak Ridge K-25 Site may be obtained by contacting:

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423-241-2224, FAX 423-576-5333

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Oak Ridge, TN 37831-7363
423-241-2773, FAX 423-576-7668

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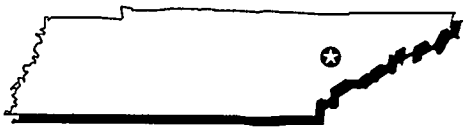
Waste Generation and Pollution Prevention Progress Fact Sheet

Oak Ridge National Laboratory



Oak Ridge National Laboratory – 1994

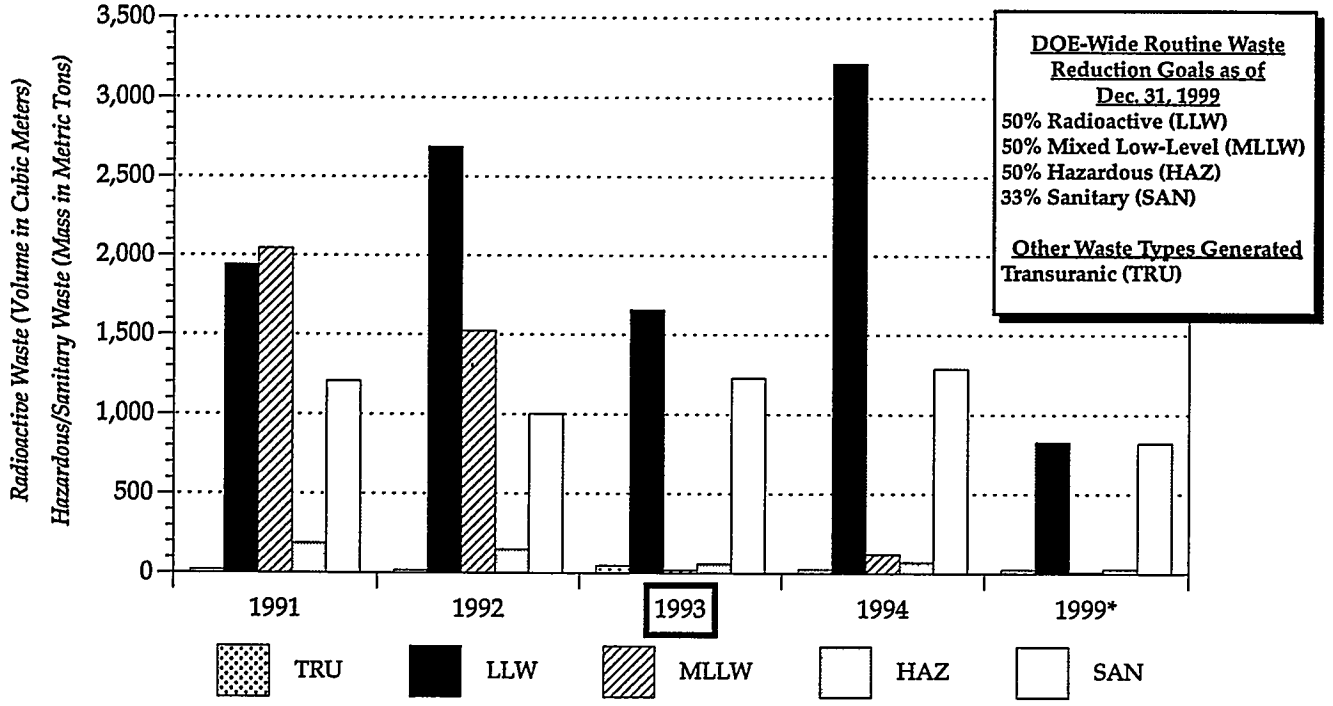
Location:	**Oak Ridge, Tennessee**
Site Size:	**4,700 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Energy Research**
DOE Employees:	**33**
Prime Contractor Employees:	**5,995**

Facility Mission

The mission of the Oak Ridge National Laboratory is to conduct basic and applied research and development to advance the nation's energy resources, environmental quality, scientific knowledge, educational foundations, and economic competitiveness. The Laboratory collaborates with Federal agencies, industry, and universities.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The use of non-ozone depleting refrigerants in heating, ventilating, and air conditioning equipment, and a reduction in leakage eliminated 1.5 metric tons of waste.
- The High Flux Isotope Reactor was fitted with new prefilter units to eliminate backwashing with caustic solutions, which eliminated the generation of large volumes of low-level radioactive waste.
- An operational change reduced the exhaust filter system wastestream by approximately 80 percent, and also decreased electricity usage.
- An old deionizer was replaced by a new unit, eliminating 18.9 cubic meters of process wastewater.
- Hazardous oils were replaced by non-Resource Conservation and Recovery Act regulated hazardous waste substitutes in precision optics manufacturing processes.
- Trinitrotoluene-contaminated soil was bioremediated for reuse as compost and fill dirt, eliminating approximately 4,500 pounds of soil from landfill disposal.
- Single-use plastic bags were replaced by reusable nylon bags.
- Coal ash was reburned for reuse in cement.
- Retread tires and lead-acid batteries were recycled, eliminating nearly 40,000 pounds of waste.

Materials Recycled by the Oak Ridge National Laboratory in 1994

Recycled Material	Oak Ridge National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	18	1,420
Metals	27	21,797
Paper	310	14,486
Other Materials*	1,812	18,574
GRAND TOTAL	*2,167*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furnitureloffice equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Oak Ridge National Laboratory may be obtained by contacting:

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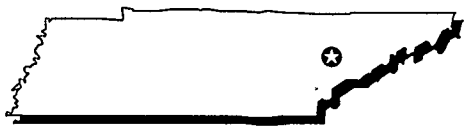
Waste Generation and Pollution Prevention Progress

Fact Sheet

Oak Ridge Y-12 Plant



Oak Ridge Y-12 Plant – 1994

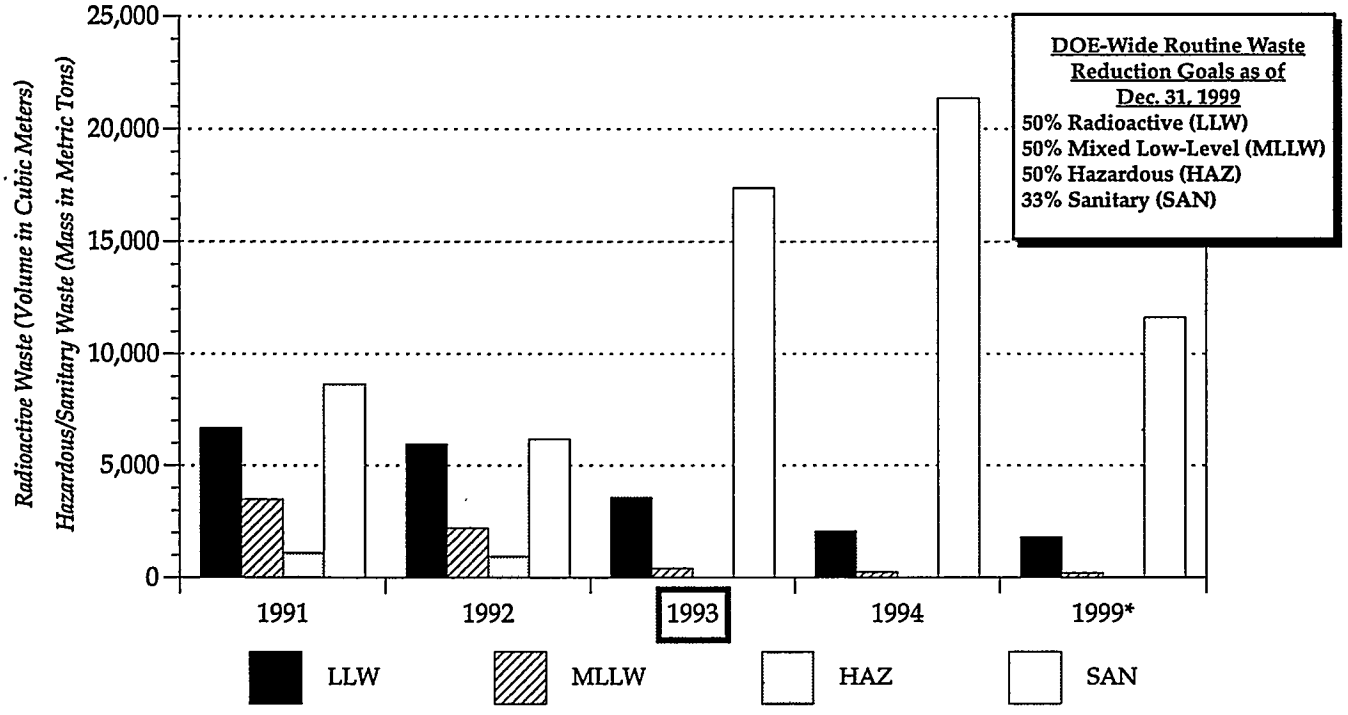
Location:	**Oak Ridge, Tennessee**
Site Size:	**800 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Defense Programs**
DOE Employees:	**175**
Prime Contractor Employees:	**5,376**

Facility Mission

The mission of the Oak Ridge Y-12 Plant has changed from weapons production and assembly-oriented programs to disassembly, special materials storage and management, technology transfer and "work-for-others," and stockpile capability evaluation. The Oak Ridge Y-12 Plant serves as a key manufacturing technology center for the development and demonstration of unique materials, components, and services important to DOE and the nation. This is accomplished through the reclamation and storage of nuclear materials, manufacture of nuclear materials and components for the nation's defense capabilities, support to national security programs, and services provided to other customers as approved by DOE.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- A leak detection program helped reduce Y-12 Plant chlorofluorocarbon emissions by more than 68 percent compared to 1992 levels.
- Chlorofluorocarbon containment units were procured for 34 existing chillers, significantly reducing the release of chlorofluorcarbons to the atmosphere, and conserving expensive refrigerant.
- Hydraulically driven centrifuges were replaced by electrically driven units, eliminating the disposal of approximately 200 gallons of waste hydraulic oil.
- Vapor degreasers were replaced by ultrasonic cleaners that use aqueous detergents.
- A new urine analysis instrument was installed that does not require photographic plates and developing solutions, eliminating 67 percent of the corrosive waste formerly generated by the process.
- Reclaimed 1,200 gallons of transformer oil.
- Acid used to clean Inductively Coupled Plasma glassware was recycled.
- Anisole used in foam production was replaced by DuPont DBE, eliminating a Resource Conservation and Recovery Act regulated solid hazardous wastestream.
- Treatment facility processes were modified to reduce the amount of mixed waste sludge generated at the site.
- Ozone was used to control the biofouling and treatment of cooling towers, which eliminated toxic chemical discharges into the East Fork of Poplar Creek.
- A rechargeable battery system is being used at the Y-12 Plant to reduce battery disposal waste.

Materials Recycled by the Oak Ridge Y-12 Plant in 1994

Recycled Material	Oak Ridge Y-12 Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	19	1,420
Metals	109	21,797
Paper	382	14,486
Other Materials*	98	18,574
GRAND TOTAL	*608*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furnitureloffice equipment, fly ash, and high explosives.*

- Non-contaminated, non-pressure treated scrap wood was recycled into mulch.
- The Oak Ridge Y-12 Plant recycled printer toner cartridges, scrap metal, styrofoam packaging, diesel fuel, and lead acid batteries.

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Oak Ridge Y-12 Plant may be obtained by contacting:

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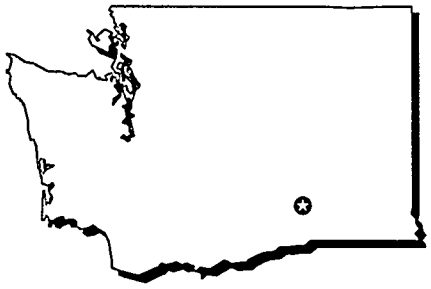
Waste Generation and Pollution Prevention Progress Fact Sheet

Pacific Northwest National Laboratory



Pacific Northwest National Laboratory – 1994

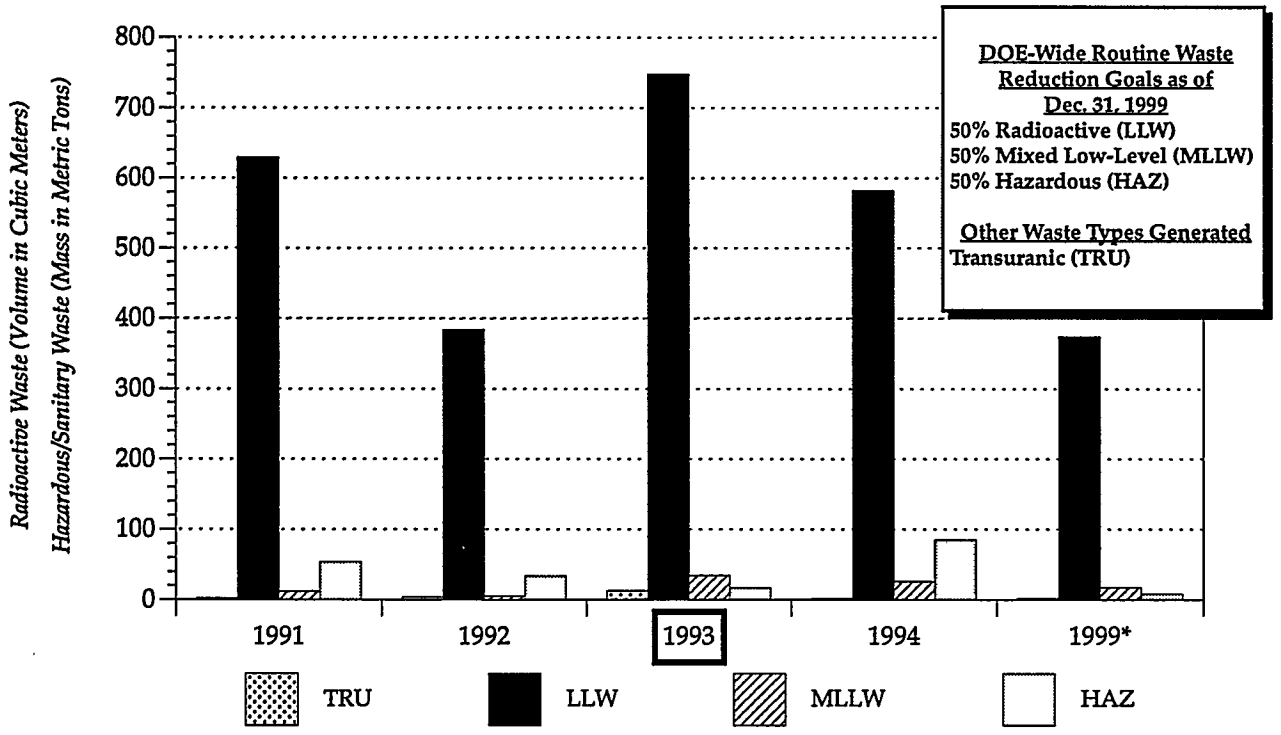
Location:	**Richland, Washington**
Site Size:	**358,000 Acres**
Operations Office:	**Richland**
Lead Program Office:	**Energy Research**
DOE Employees:	**500**
Prime Contractor Employees:	**3,743**

Facility Mission

The mission of the Pacific Northwest National Laboratory is to research and develop energy and environmental programs, including tank core characterization of single shell and double shell tanks, in situ vitrification, melter technology, and site-wide groundwater monitoring/modeling studies.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Process wastewater discharge was reduced by 51 gallons per minute.
- Scintillation cocktail radioactive mixed waste was reduced by approximately four cubic meters by using microscale techniques and by substituting regulated scintillation cocktails with non-regulated scintillation cocktails.
- Lead-acid and gell-cell batteries were recycled by an outside vendor, which reduced annual hazardous waste disposal volume by approximately 12 drums.
- Used oil was recycled, which reduced annual hazardous waste disposal volume by approximately three drums.
- Spent solvent was recycled, which reduced annual hazardous waste disposal volume by approximately one drum.
- Computer diskettes, toner cartridges, software materials, and paper were recycled.

Materials Recycled by the Pacific Northwest National Laboratory in 1994

Recycled Material	Pacific Northwest National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	not tracked	1,420
Metals	not tracked	21,797
Paper	125	14,486
Other Materials*	not tracked	18,574
GRAND TOTAL	*125*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Pacific Northwest National Laboratory may be obtained by contacting:

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Paducah Gaseous Diffusion Plant

Paducah Gaseous Diffusion Plant – 1994

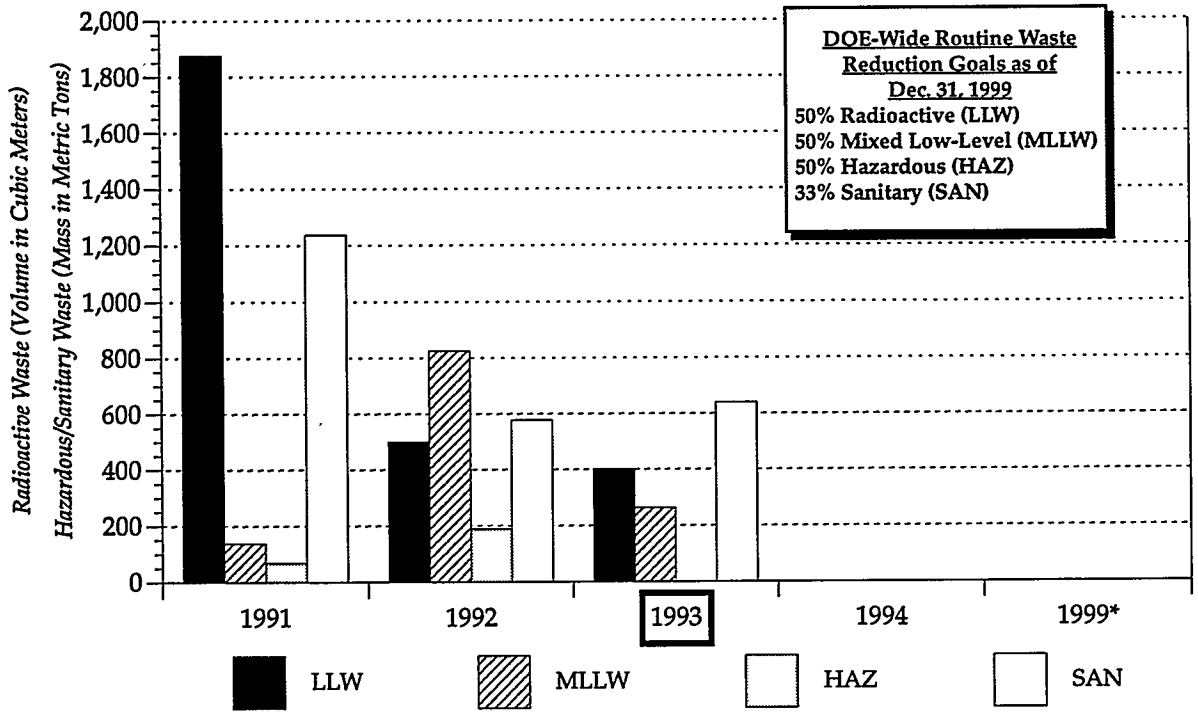
Location:	**Paducah, Kentucky**
Site Size:	**740 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**10**
Prime Contractor Employees:	**263**

Facility Mission

The primary mission of the Paducah Gaseous Diffusion Plant is to produce enriched uranium for nuclear fuel for use by commercial power plants. The facility is currently operated by the United States Enrichment Corporation (USEC), a semi-government entity. DOE, however, is responsible for environmental restoration at the site, including waste inventories predating July 1, 1993. Activities are focused on the cleanup of environmental pollution as well as the decommissioning of inactive and surplus facilities.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Packers were installed in all of the site's groundwater monitoring wells, which will reduce wastewater by 22,400 to 44,800 gallons per year.
- A well abandonment project reduced the amount of waste generated by soil cuttings and well casings.
- A cone penetrometer was used to perform a "direct-push" investigation method that does not generate drill cuttings, eliminating 98 drums of waste.

Materials Recycled by the Paducah Gaseous Diffusion Plant in 1994

Recycled Material	Paducah Gaseous Diffusion Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	0	21,797
Paper	0	14,486
Other Materials*	0	18,574
GRAND TOTAL	***0***	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Paducah Gaseous Diffusion Plant may be obtained by contacting:

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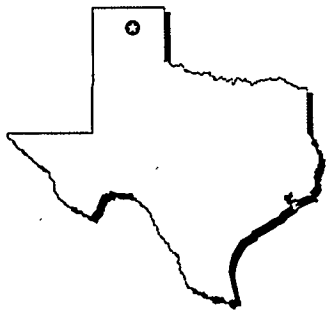
Waste Generation and Pollution Prevention Progress

Fact Sheet

Pantex Plant



Pantex Plant – 1994

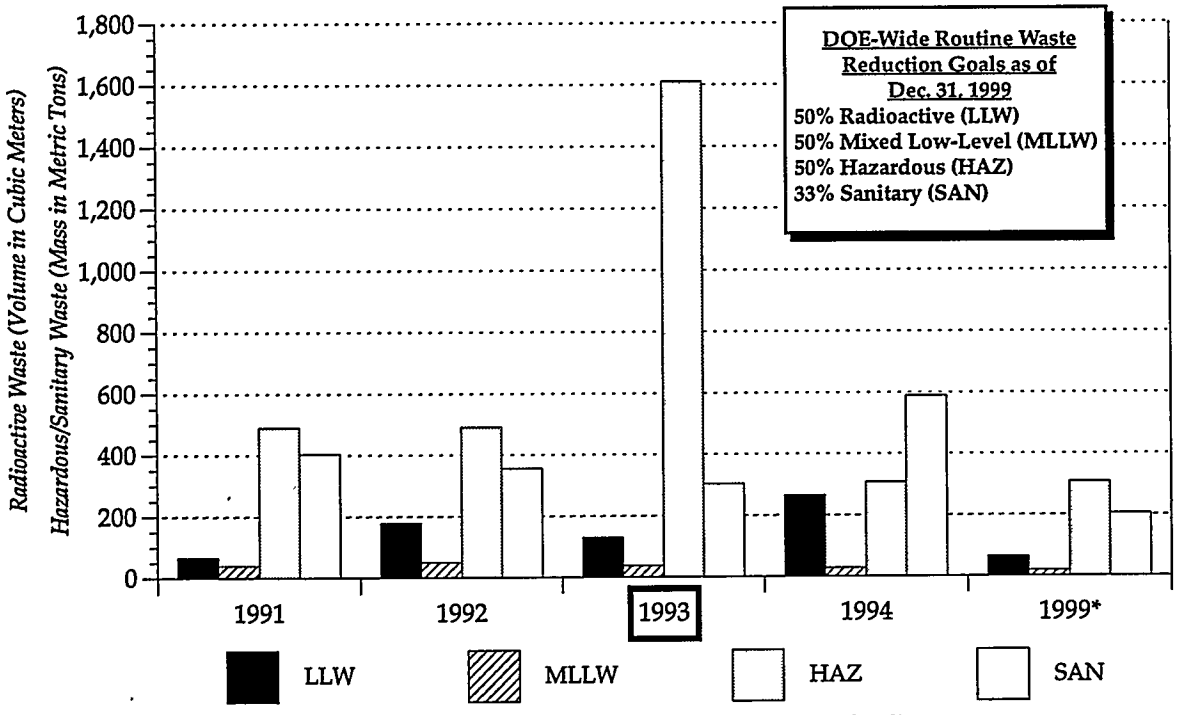
Location:	**Amarillo, Texas**
Site Size:	**15,936 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**200**
Prime Contractor Employees:	**3,305**

Facility Mission

The principal mission of the Pantex Plant is to manage the disassembly of nuclear weapons. The Pantex Plant is also responsible for the fabrication of high explosives for nuclear weapons, assembly of nuclear weapons, maintenance and evaluation of the nation's nuclear weapons stockpile, and dismantlement of nuclear weapons as they are retired from the stockpile. The Pantex Plant will provide interim storage for plutonium in a facility that DOE plans to develop.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The Pantex Plant successfully reduced the generation of mixed waste by 26 percent, Resource Conservation and Recovery Act regulated hazardous waste by 77 percent, State regulated hazardous waste by 60 percent, and Toxic Substances Control Act regulated hazardous waste by 95 percent in 1994.
- Disassembled high explosives were sold to a mining company for reuse instead of being disposed onsite.
- Hazardous solvents and paints were replaced by water-based paints and solvents, which reduced hazardous waste generation by 318 gallons.
- Tritium-contaminated components recovered from the dismantlement of weapons were recycled.
- Press-crushing empty paint containers reduced waste volume by 65 drums.
- An alkaline battery replacement program reduced waste volume by five drums.
- Materials recycled include steel, mixed steel materials, fluorescent light bulbs, antifreeze, and Freon.

Materials Recycled by the Pantex Plant in 1994

Recycled Material	Pantex Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	30	1,420
Metals	66	21,797
Paper	9	14,486
Other Materials*	7	18,574
GRAND TOTAL	*112*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Pantex Plant may be obtained by contacting:

Jocelyn Siegel
U.S. Department of Energy Operations Office, Albuquerque
P.O. Box 5400
Albuquerque, NM 87185-5400
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Pantex Plant
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9/26/96-EM-gm240

Waste Generation and Pollution Prevention Progress

Fact Sheet

Pinellas Plant

Pinellas Plant – 1994

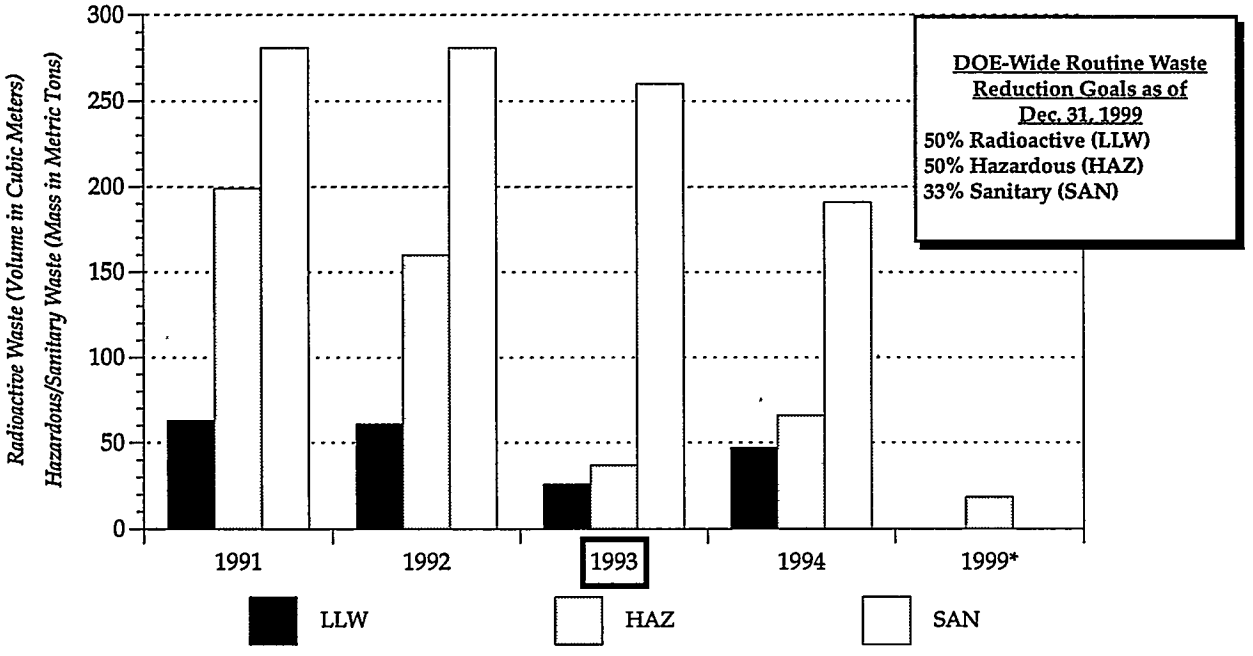
Location:	**Largo, Florida**
Site Size:	**99.2 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**33**
Prime Contractor Employees:	**850**

Facility Mission

The mission of the Pinellas Plant is to safely shut down the facility, and then prepare the site for alternative use as a community resource for economic development. The transition includes moving material and equipment to other DOE sites to continue production of certain products and assemblies at those locations. Unneeded materials will be processed as excess, and will then be scrapped or transferred to the Community Reuse Organization if it can be used to aid economic development initiatives.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline. DOE waste generation wil cease by September 1997 except for waste generated by environmental restoration activities.*

(continued from page 1)

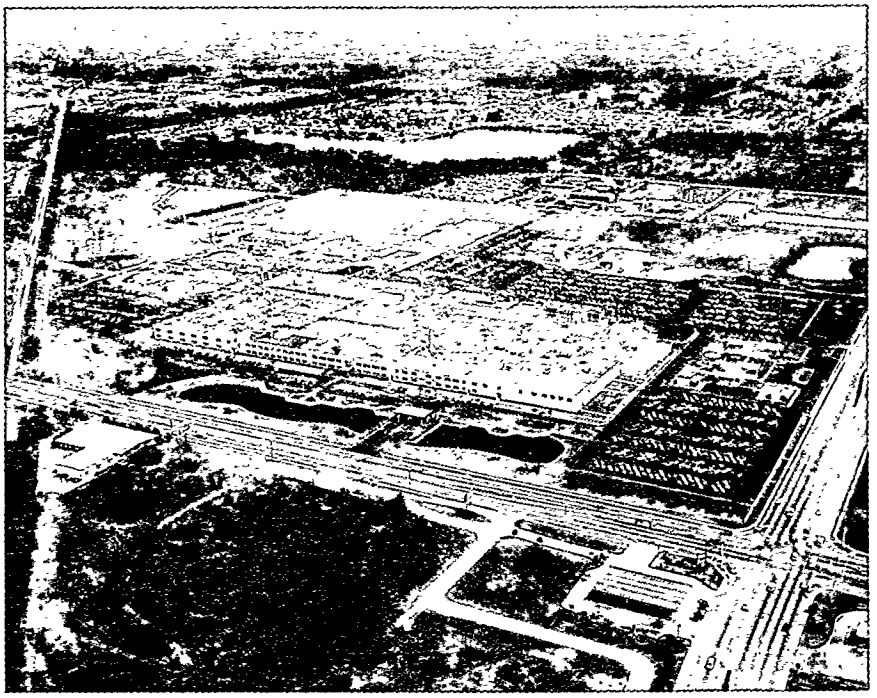
1994 Pollution Prevention and Recycling Accomplishments

- Low-level waste volume was reduced by 11.7 cubic meters (56 drums) through compaction, saving approximately $76,000 in disposal costs.
- Materials recycled include office paper, cardboard, scrap metals, aluminum, glass, plastic, toner cartridges, styrofoam peanuts, floppy disks, old software, excess office supplies, machine shop coolant, halogenated solvents, and excess chemicals.

Materials Recycled by the Pinellas Plant in 1994

Recycled Material	Pinellas Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	<0.5	1,420
Metals	99	21,797
Paper	22	14,486
Other Materials*	69	18,574
GRAND TOTAL	*190*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*



The Pinellas Plant

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Pinellas Plant may be obtained by contacting:

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9/30/96-EM-gm240

Waste Generation and Pollution Prevention Progress Fact Sheet

Pittsburgh Energy Technology Center

Pittsburgh Energy Technology Center – 1994

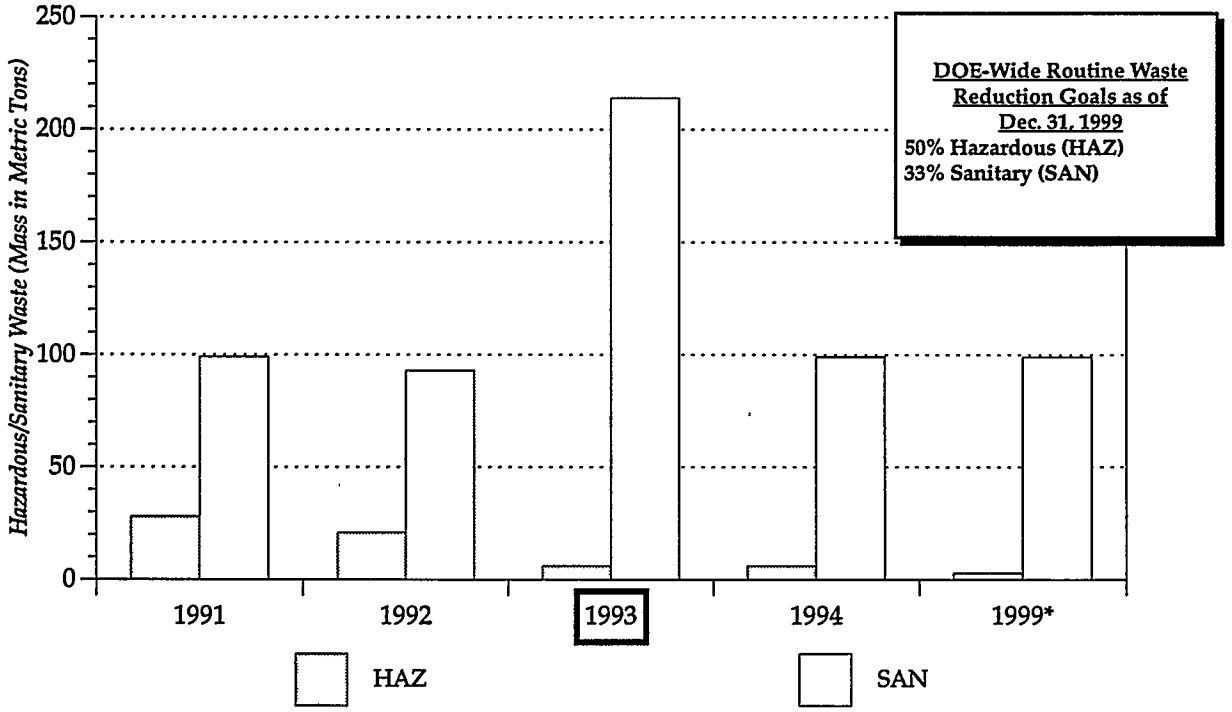
Location:	**Pittsburgh, Pennsylvania**
Site Size:	**59 Acres**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Fossil Energy**
DOE Employees:	**283**
Prime Contractor Employees:	**276**

Facility Mission

The mission of the Pittsburgh Energy Technology Center is to develop cost-effective and environmentally sound technologies that improve the use of the Nation's coal supply.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- High efficiency purge add-on devices were fitted to two onsite chillers to recover and recycle refrigerant.
- Halon and other chemical fire extinguishing systems are being replaced by water extinguishing systems to reduce hazardous waste.
- Sanitary waste is being compacted, which has reduced disposal volume by 95 percent.
- Materials recycled include office paper, aluminum cans, corrugated paper, and leaf waste.

Materials Recycled by the Pittsburgh Energy Technology Center in 1994

Recycled Material	Pittsburgh Energy Technology Center *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	<0.5	1,420
Metals	16	21,797
Paper	7	14,486
Other Materials*	<0.5	18,574
GRAND TOTAL	*23*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Pittsburgh Energy Technology Center may be obtained by contacting:

David L. Schwartz
Pittsburgh Energy Technology Center
P.O. Box 10940
Pittsburgh, PA 15235
412-892-6298, FAX 412-892-6228

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Waste Generation and Pollution Prevention Progress Fact Sheet

Portsmouth Gaseous Diffusion Plant

Portsmouth Gaseous Diffusion Plant – 1994

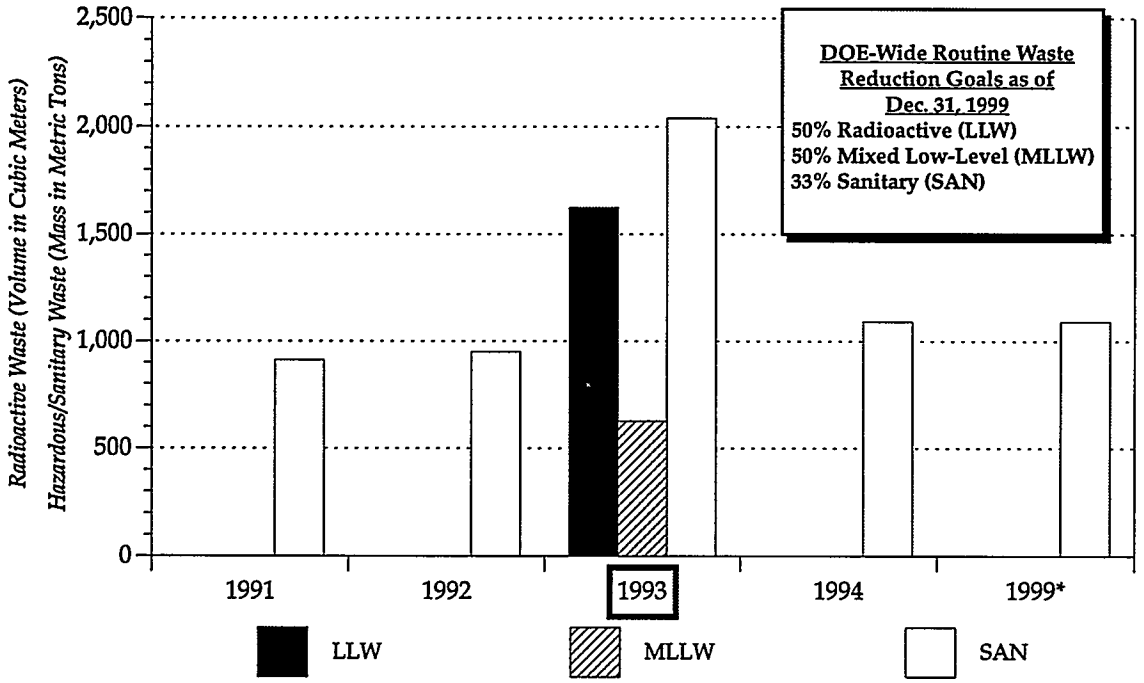
Location:	**Piketon, Ohio**
Site Size:	**3,714 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**14**
Prime Contractor Employees:	**437**

Facility Mission

The primary mission of the Portsmouth Gaseous Diffusion Plant is to produce enriched uranium for nuclear fuel for use by commercial powerplants. Although the Portsmouth Gaseous Diffusion Plant is now managed by the United States Enrichment Corporation (USEC), a semi-government operation, environmental restoration and related waste management activities are still conducted by DOE. These activities are focused on the cleanup of environmental pollution as well as the decommissioning of inactive and surplus facilities.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

Note: In 1995, all waste categories changed to cleanup/stabilization due to mission change.

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Calendar year 1994 was the first year DOE was not responsible for waste generated by production operations at the Portsmouth Gaseous Diffusion Plant. Overall waste generation at the Plant decreased 50 percent in 1994 compared to 1993, and mixed Toxic Substances Control Act regulated hazardous waste decreased by 25 percent.
- In situ thermal enhanced vapor extraction was performed on a Resource Conservation and Recovery Act regulated hazardous waste closure. This process treated tight clay soils and removed volatile organic chemicals from an area that had been used for waste oil decomposition. More than 19,000 cubic meters of contaminated soil was avoided by use of the extraction process.
- An innovative technology program referred to as "direct push" was implemented, which uses a hydraulic ram to drive a small diameter rod into the ground to obtain soil samples. Only two cubic feet of materials are generated using direct push technology, compared to over 50 cubic feet of materials generated using an auger. To date, more than 77 sampling locations have used the direct push technology, which has avoided more than 3,700 cubic feet of waste.
- A classified sanitary landfill was capped for closure using a process that avoided approximately 10,000 cubic yards of waste. During this closure, soft spots and wet spots under the cap were repaired using rock and stabilization fabric instead of excavation and backfill, avoiding approximately 16,000 cubic yards of waste.

Materials Recycled by the Portsmouth Gaseous Diffusion Plant in 1994

Recycled Material	Portsmouth Gaseous Diffusion Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	0	21,797
Paper	56	14,486
Other Materials*	0	18,574
GRAND TOTAL	*56*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furnitureloffice equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Portsmouth Gaseous Diffusion Plant may be obtained by contacting:

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U.S. Department of Energy Operations Office, Oak Ridge
EW-921, P.O. Box 2001
Oak Ridge, TN 37830
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Portsmouth Gaseous Diffusion Plant
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Princeton Plasma Physics Laboratory

Princeton Plasma Physics Laboratory – 1994

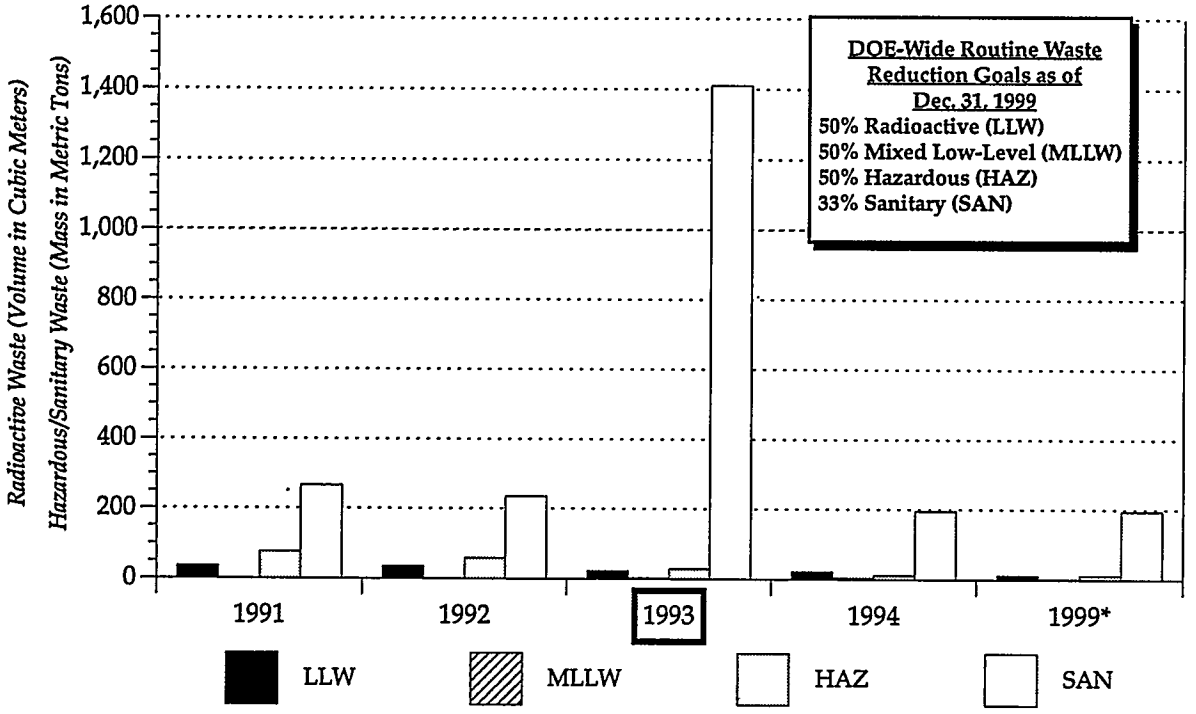
Location:	**Princeton, New Jersey**
Site Size:	**72 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**20**
Prime Contractor Employees:	**620**

Facility Mission

The mission of the Princeton Plasma Physics Laboratory is to conduct research in magnetic confinement fusion, and to investigate the practical applications of plasma physics. Activities include the experimental demonstration of economical fusion power through the development of the Tokamak series of fusion reactors.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Underground storage tanks were replaced by aboveground storage tanks, enabling the recycling of 555 tons of soil and 10,000 gallons of oil.
- High efficiency purge add-on devices were installed on two onsite chillers to pump recovered refrigerant back to the chillers.
- The laundering of anti-contamination clothing avoided the generation of approximately 250 bags of low-level radioactive waste.
- Halon, an ozone depleting chemical, was replaced by water and carbon dioxide for fire suppression.
- Recycled 10,181 gallons of fuel oil and diesel fuel from the Underground Storage Tank project, and recycled 973 gallons of machinery and lubricating oils.
- Other materials recycled include concrete, mercury, and tritium.

Materials Recycled by the Princeton Plasma Physics Laboratory in 1994

Recycled Material	Princeton Plasma Physics Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	43	1,420
Metals	192	21,797
Paper	116	14,486
Other Materials*	519	18,574
GRAND TOTAL	*870*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Princeton Plasma Physics Laboratory may be obtained by contacting:

Ray Lang
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2230, FAX 630-252-2654

Scott B. Larson
Princeton Plasma Physics Laboratory
P.O. Box 451, James Forrestal Campus, U.S. Route 1
Princeton, NJ 08543
609-243-3387, FAX 609-243-3366

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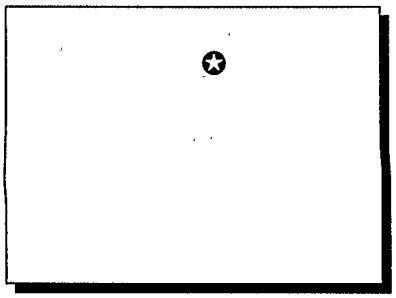
Waste Generation and Pollution Prevention Progress Fact Sheet

Rocky Flats Environmental Technology Site



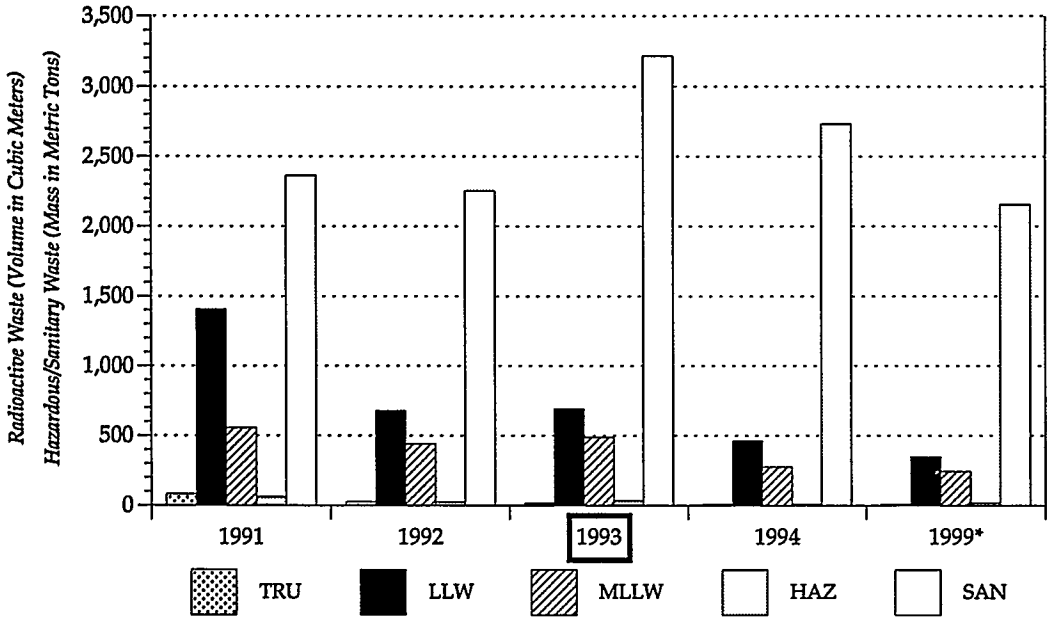
Rocky Flats Environmental Technology Site – 1994	
Location:	**Golden, Colorado**
Site Size:	**6,550 Acres**
Operations Office:	**Rocky Flats**
Lead Program Office:	**Environmental Management**
DOE Employees:	**220**
Prime Contractor Employees:	**6,068**

Facility Mission

The mission of the Rocky Flats Environmental Technology Site has transitioned from defense production to environmental cleanup (defense operations obligations were completed in 1994). The Site's new mission is to manage waste and materials, cleanup, and convert the site to beneficial use in a manner that is safe, environmentally and socially responsible, physically secure, and cost-effective. The goal is to accelerate actions to achieve cleanup and site closure in the shortest possible time.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

DOE-Wide Routine Waste Reduction Goals as of Dec. 31, 1999
50% Radioactive (LLW)
50% Mixed Low-Level (MLLW)
50% Hazardous (HAZ)
33% Sanitary (SAN)

Other Waste Types Generated
Transuranic (TRU)

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Radioactive waste generation decreased 21 percent, from 1,085 cubic meters to 851 cubic meters.
- Hazardous waste generation increased 442 percent, from 36,514 kilograms to 198,009 kilograms, primarily due to a massive excess chemical cleanup during 1994.
- Toxic Substances Control Act regulated hazardous waste decreased 46 percent, from 10,904 kilograms to 5,907 kilograms.
- Sanitary waste generation decreased 15 percent, from 3,216 metric tons to 2,732 metric tons, primarily due to increased recycling.
- A chemical tracking program was implemented for chemical reuse that eliminated over 700 gallons of liquid chemical waste and 1,200 pounds of solid chemical waste.
- Through planning and process changes, environmental restoration activities prevented the generation of 1,300 55-gallon drums of waste.
- Sludge was reduced by 50 percent at the Operable Unit-2 Field Treatability Unit waste treatment facility.
- A monitoring well installation program using air drilling/vibratory drilling methods rather than conventional drilling to drill 40 test wells eliminated the generation of 257,000 pounds of Resource Conservation and Recovery Act regulated hazardous waste.
- Recycled used motor oil, oil/fuel filters, Freon, and antifreeze by extracting these materials from vehicles.

Materials Recycled by the Rocky Flats Environmental Technology Site in 1994

Recycled Material	Rocky Flats Environmental Technology Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	3	1,420
Metals	463	21,797
Paper	400	14,486
Other Materials*	6	18,574
GRAND TOTAL	*872*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Rocky Flats Environmental Technology Site may be obtained by contacting:

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U.S. Department of Energy, Rocky Flats Office
Building 460, Room #14
Golden, CO 80402
303-966-3135, FAX 303-966-4728

Randy Leitner
Rocky Flats Environmental Technology Site
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Golden, CO 80402
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Sandia National Laboratories/California

Sandia National Laboratories/California – 1994

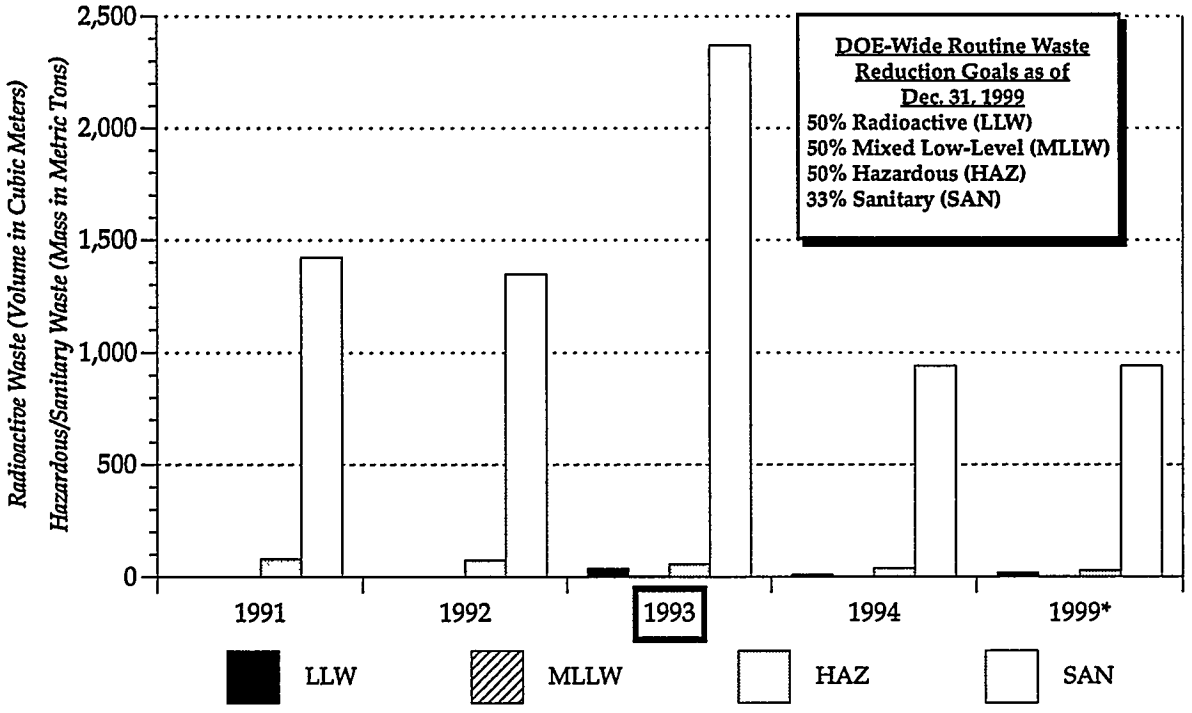
Location:	**Livermore, California**
Site Size:	**413 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**0**
Prime Contractor Employees:	**970**

Facility Mission

The primary mission of the Sandia National Laboratories/California is to conduct research and development in the interest of national security, with emphasis on nuclear weapons development and engineering. While performing this mission, the Sandia National Laboratories/California has evolved into a multi-program laboratory, pursuing broad aspects of national security issues, including advanced military technologies, energy programs, arms verification and control technology, and applied research in many scientific fields. Research activities are grouped into four leading-edge efforts: materials sciences, combustion research, energy, and applied mathematical sciences.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The cleanup and transition of the Tritium Research Facility is continuing. A project plan to relocate experiments, reuse equipment, reduce the tritium inventory, and perform building decontamination tasks was implemented. These activities have avoided millions of pounds of low-level radioactive and demolition waste, avoided 200,000 pounds of equipment waste, and have saved DOE approximately $20 million.
- Replaced an old photographic processor with a small Hope/Kodak C-41 Processor, which reduced chemical waste by 50 percent.
- The Machine Shop replaced an old part washing unit with a smaller contained unit, which reduced operating chemicals by 92 percent.
- Aqua-Syn coolant was replaced by the more efficient Syntilo 9154 coolant, which reduced spent coolant by 640 pounds.
- Materials recycled include paper, glass, toner cartridges, scrap metal, batteries, oils, oil filters, coolant, fluorescent light tubes; photo developer solution, filters, and film containing silver.

Materials Recycled by the Sandia National Laboratories/California in 1994

Recycled Material	Sandia National Laboratories/CA *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	6	1,420
Metals	1,094	21,797
Paper	27	14,486
Other Materials*	13	18,574
GRAND TOTAL	*1,140*	*56,277*

* *Other materials may include toner cartridges, foodlgarden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furnitureloffice equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Sandia National Laboratories/California may be obtained by contacting:

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U.S. Department of Energy Operations Office, Albuquerque
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Albuquerque, NM 87185-5400
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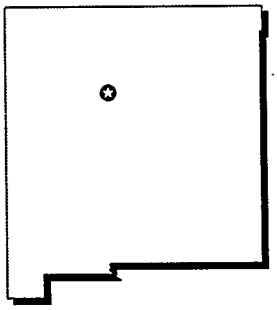
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Sandia National Laboratories/New Mexico



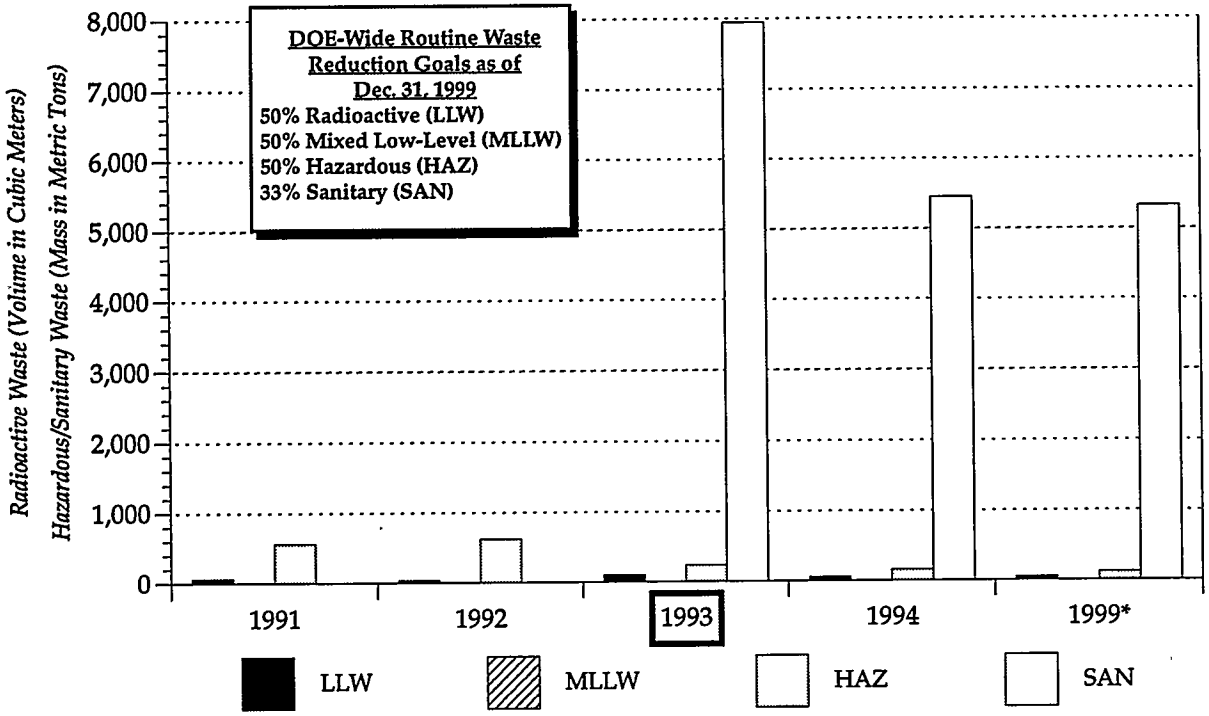
Sandia National Laboratories/New Mexico – 1994	
Location:	**Albuquerque, New Mexico**
Site Size:	**2,820 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**40**
Prime Contractor Employees:	**7,440**

Facility Mission

The primary mission of the Sandia National Laboratories/New Mexico is to conduct research and development in the interest of national security, with emphasis on nuclear weapons development and engineering. While performing this mission, the Sandia National Laboratories/New Mexico has evolved into a multi-program laboratory, with expertise in a broad range of scientific and technical fields, including fundamental energy research, energy conservation and renewable energy, nuclear reactor safety and reliability, nuclear waste management, and magnetic-confinement fusion. Recent mission changes have resulted in a decline in weapons research and development, and an increase in nuclear safeguards and security, environmental sciences, and the transfer of technologies to private industry.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Ethylene glycol antifreeze was replaced by a less toxic coolant.
- The Motor Pool Services Department instituted refrigerant recycling during vehicle maintenance.
- The Motor Pool Services Department began a program to filter used oil and then blend it with diesel fuel to burn for energy in the vehicle engine.
- Hazardous solder (tin/lead) was replaced by nonhazardous solders (tin/antimony and bismuth/tin).
- Copper Sulfate Solution was filtered and reused.
- Old computer printers were replaced by laser printers, eliminating liquid toner and dispersant.
- Shop Metal Cutting Operations substituted DROMEX B with noncarcinogenic, biodegradable BoeLube 70105.
- General Machining Shop Operations replaced WD-40 lubricant with LPS-1 greaseless lubricant, reducing oily wastes.
- Lucite insulator stack rings were cleaned with Simple Green and a non-chlorofluorocarbon product called AMTEX CCR, eliminating Freon-contaminated waste.
- Lucite switch rings were cleaned with bulk methanol, eliminating the use of 200 percent ethyl alcohol.
- Materials recycled include waste oil, lead-acid batteries, machined metals (aluminum, brass, copper, titanium, magnesium), precious metals, lead, fluorescent light tubes, paper, cardboard, and styrofoam packing material.

Materials Recycled by the Sandia National Laboratories/New Mexico in 1994

Recycled Material	Sandia National Laboratories/NM *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	79	1,420
Metals	530	21,797
Paper	36	14,486
Other Materials*	68	18,574
GRAND TOTAL	*713*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Sandia National Laboratories/New Mexico may be obtained by contacting:

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P.O. Box 5800
Albuquerque, NM 87185-1035
505-284-3982, FAX 505-844-3747

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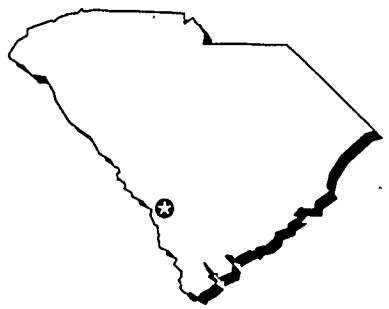
Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Savannah River Site



Savannah River Site – 1994

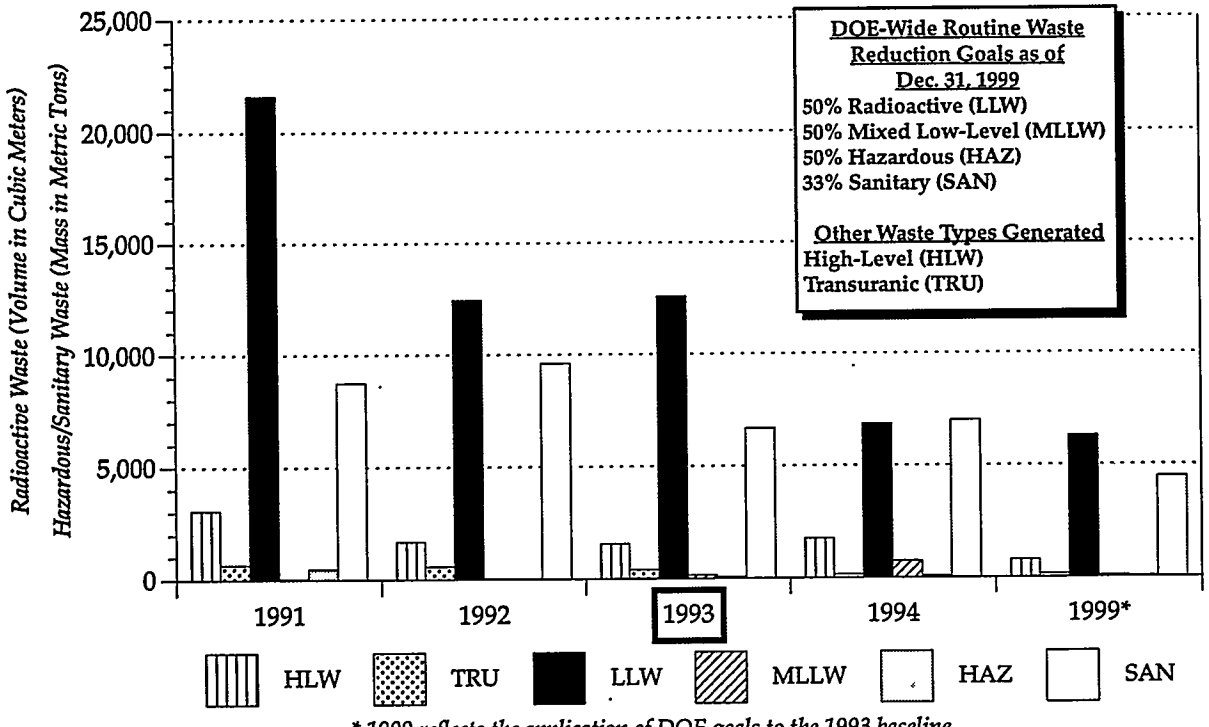
Location:	**Aiken, South Carolina**
Site Size:	**198,334 Acres**
Operations Office:	**Savannah River**
Lead Program Office:	**Defense Programs**
DOE Employees:	**592**
Prime Contractor Employees:	**14,727**

Facility Mission

The mission of the Savannah River Site is evolving as emphasis shifts from nuclear material production to environmental management. The Savannah River Site remains a major defense installation, and continues to process and purify tritium, and perform plutonium separation.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The Savannah River Site implemented innovative practices that resulted in the disposal avoidance of 3,220 cubic meters of low-level waste, exceeding the 1994 goal by over 70 percent.
- Waste minimization initiatives and the use of nonhazardous chemicals enabled the Savannah River Site to avoid 40,370 kilograms of hazardous waste and 7,060 kilograms of low-level mixed waste.
- Approximately $13.3 million in life cycle waste costs were avoided due to a 31 percent reduction (9,700 cubic meters) in solid waste generation and disposal volumes.
- Traditional field constructed containments were replaced by prefabricated radiological containment systems, eliminating more than 400 cubic meters of low-level radioactive waste.
- Mercury Springle pumps and Sargent-Welch duo-seal vacuum pumps were replaced in the Tritium Facility, eliminating the generation of tritium-contaminated mercury and oil waste streams.
- A radiological control program to reduce the size of the Contamination Areas and Radiological Buffer Areas eliminated 620 cubic meters of low-level waste, contributing to the Savannah River Site's achievement of a 42 percent reduction in low-level waste.
- The fuel/target assembly area of a shutdown reactor building was designated as a sorting and staging area for decontamination of low-level contaminated material and equipment for reuse, saving approximately $20 million.
- Catalytic oxidation systems were installed on vadose system air strippers, reducing volatile organic solvents released to the air by more than 60,000 pounds.

Materials Recycled by the Savannah River Site in 1994

Recycled Material	Savannah River Site (in Metric Tons)	DOE Complex (in Metric Tons)
Automotive	94	1,420
Metals	1,854	21,797
Paper	910	14,486
Other Materials*	15	18,574
GRAND TOTAL	*2,873*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Savannah River Site may be obtained by contacting:

Ed Korzun
U.S. Department of Energy, Savannah River Operations Office
P.O. Box A
Aiken, SC 29808
803-725-1589, FAX 803-725-3616

Keith Stone
Westinghouse Savannah River Company
Savannah River Site, Building 705-3C
Aiken, SC 29808
803-557-6317, FAX 803-557-6306

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Stanford Linear Accelerator Center

Stanford Linear Accelerator Center – 1994

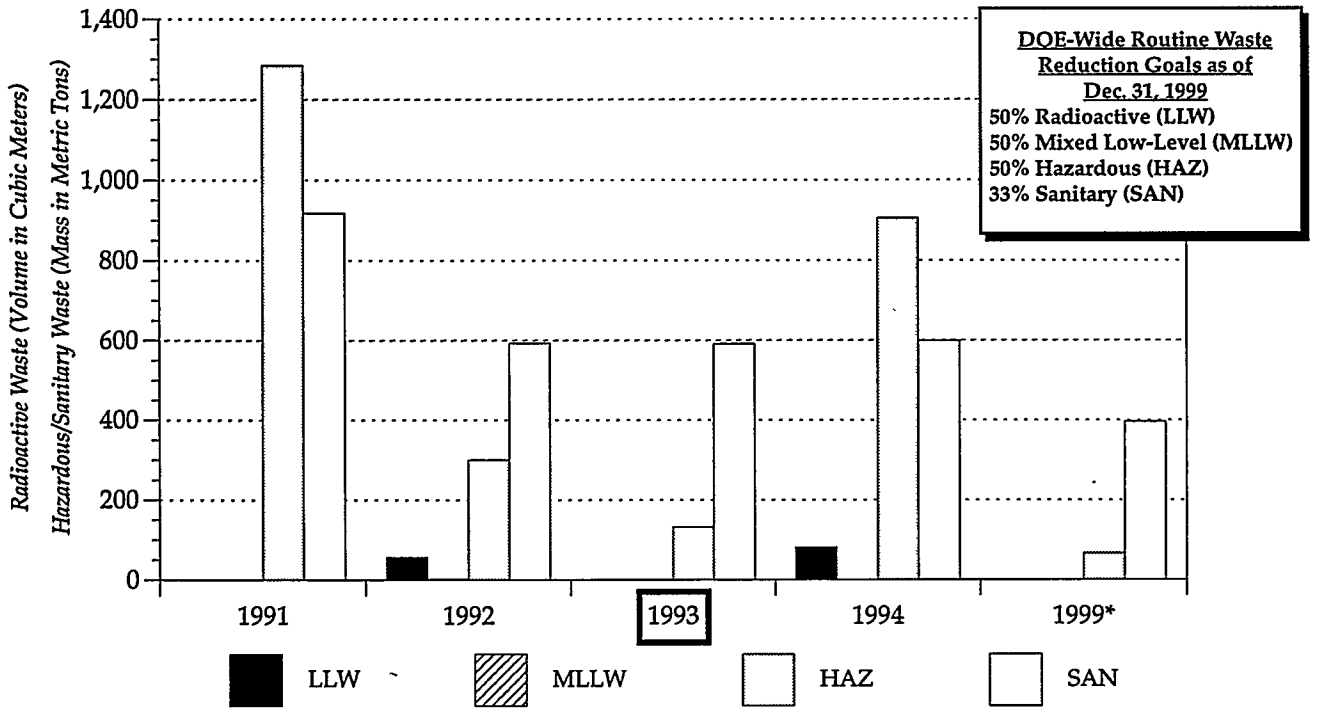
Location:	**Stanford, California**
Site Size:	**426 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Energy Research**
DOE Employees:	**8**
Prime Contractor Employees:	**1,568**

Facility Mission

The primary mission of the Stanford Linear Accelerator Center is to perform research in high energy particle physics and accelerators. The Center concentrates on theoretical and experimental research in elementary particle physics and development of new accelerator and particle detection techniques.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- The disposal of 110 empty propane cylinders was avoided by changing handling procedures, enabling the recycling of the cylinders as scrap metal.
- Heavy metal sludge produced by metal finishing operations was reduced by modifying rinse water and chemical treatment.
- A program was implemented to segregate low-level radioactive and nonradioactive waste in radioactive material management areas.
- Removal of polychlorinated biphenyl-containing equipment will continue to reduce Toxic Substances Control Act regulated hazardous waste.
- Materials recycled include gold, silver, and oil.

Materials Recycled by the Stanford Linear Accelerator Center in 1994

Recycled Material	Stanford Linear Accelerator Center *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	6	1,420
Metals	318	21,797
Paper	171	14,486
Other Materials*	137	18,574
GRAND TOTAL	*632*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Stanford Linear Accelerator Center may be obtained by contacting:

Karin King
U.S. Department of Energy, Oakland Office
1301 Clay Street
Oakland, CA 94612-5208
510-637-1638, FAX 510-637-1646

Richard Cellamare
Stanford Linear Accelerator Center
P.O. Box 4349, MS-77
Stanford, CA 94309
415-926-3401, FAX 415-926-3175

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Waste Generation and Pollution Prevention Progress Fact Sheet

Weldon Spring Site Remedial Action Project

Weldon Spring Site Remedial Action Project – 1994

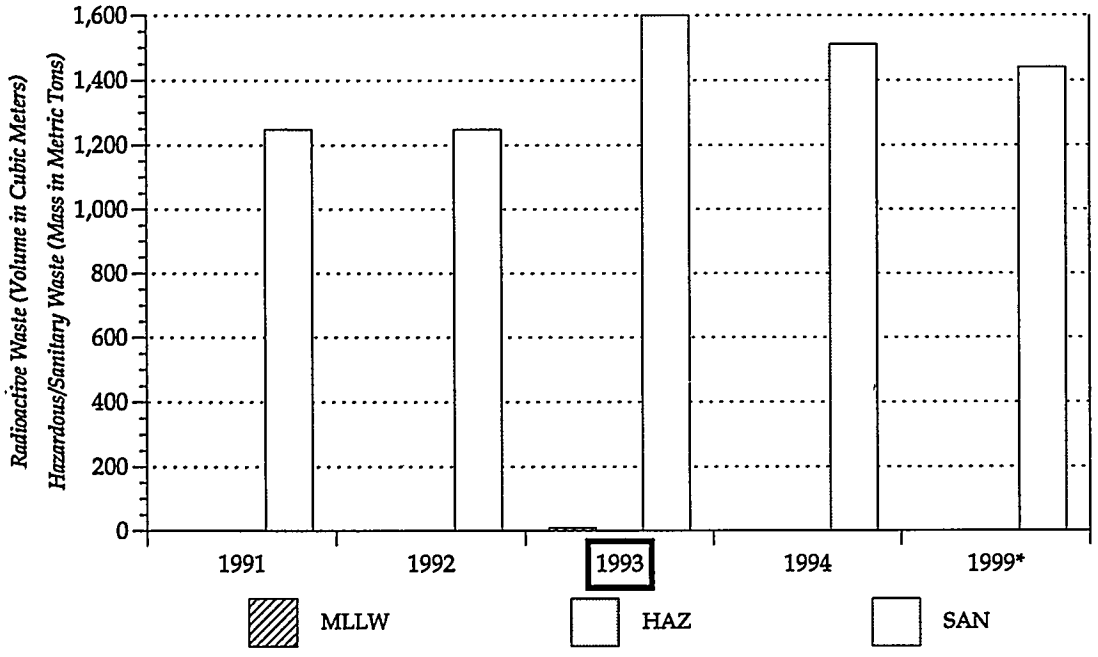
Location:	**St. Charles, Missouri**
Site Size:	**230 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**13**
Prime Contractor Employees:	**281**

Facility Mission

The Weldon Spring Site Remedial Action Project's mission is to eliminate potential hazards to the public and the environment and to make surplus real property available for other use. This will be accomplished by conducting remedial actions that will place the quarry, raffinate pits, chemical plant, and vicinity properties in a radiologically and chemically safe condition.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



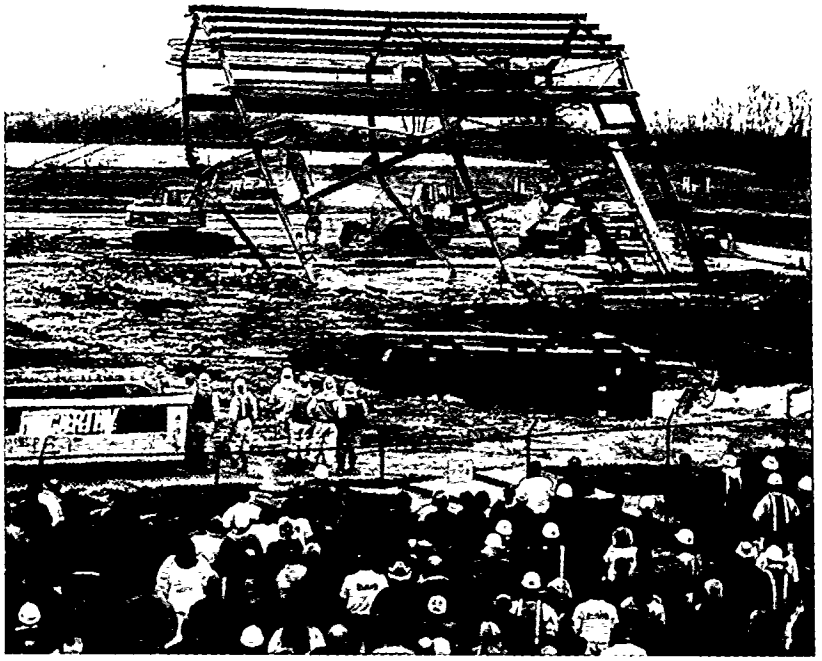
DOE-Wide Routine Waste Reduction Goals as of Dec. 31, 1999
50% Mixed Low-Level (MLLW)
50% Hazardous (HAZ)
33% Sanitary (SAN)

** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Used personal protective equipment was compacted into 55-gallon containers, which reduced waste volume by 20 percent.
- Surplus inventory materials were collected for reuse.
- Waste soil was used for interim capping and stabilization.



Building dismantlement was completed on December 8, 1994.

Materials Recycled by the Weldon Spring Site Remedial Action Project in 1994

Recycled Material	Weldon Spring Site Remedial Action Project *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,420
Metals	not tracked	21,797
Paper	9	14,486
Other Materials*	not tracked	18,574
GRAND TOTAL	*9*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Weldon Spring Site Remedial Action Project may be obtained by contacting:

Karen Catlett
U.S. Department of Energy Operations Office, Oak Ridge
EW-921, P.O. Box 2001
Oak Ridge, TN 37830
423-241-2224, FAX 423-576-5333

Tom Pauling
Weldon Spring Site Remedial Action Project
7295 Highway 94 South
U.S. DOE Site Office
St. Charles, MO 63304
314-441-8086, FAX 314-447-0739

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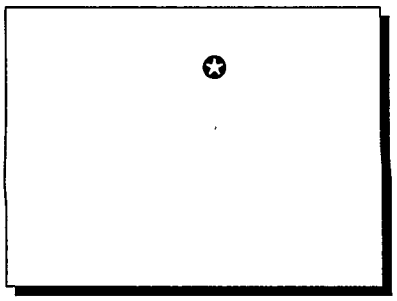
Waste Generation and Pollution Prevention Progress Fact Sheet

Western Area Power Administration



Western Area Power Administration – 1994

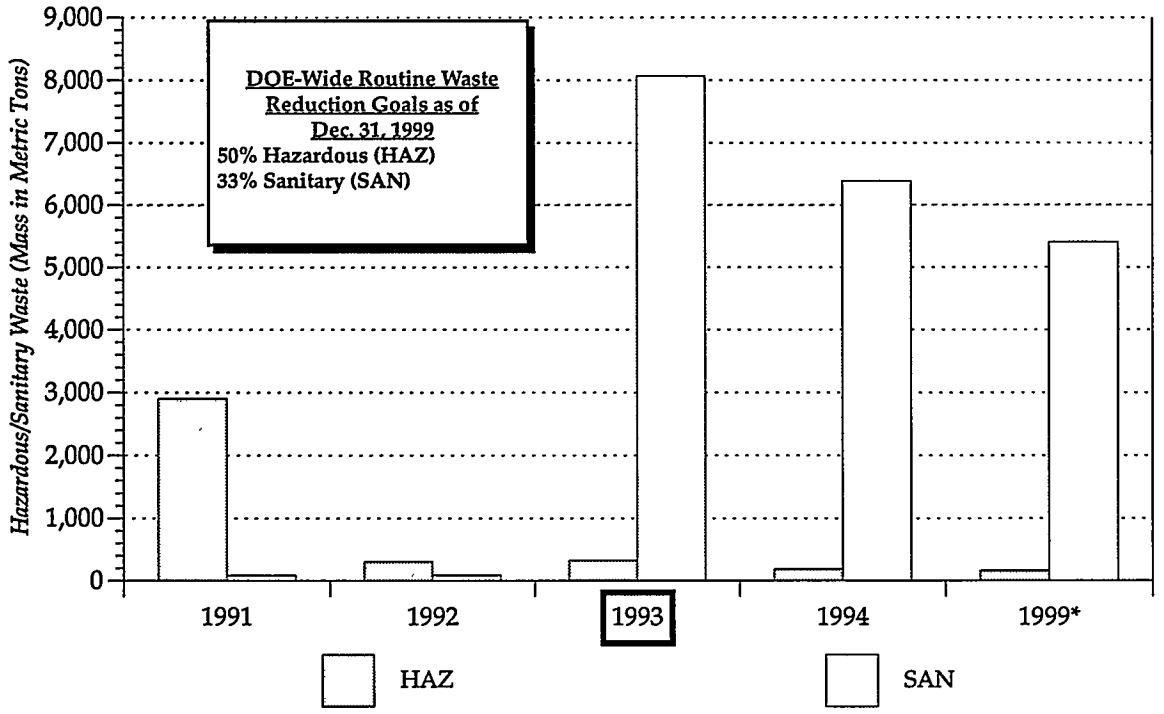
Location:	**Golden, Colorado**
Site Size:	**n/a**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Power Marketing Administration**
DOE Employees:	**1,464**
Prime Contractor Employees:	**589**

Facility Mission

The primary and long-standing mission of the Western Area Power Administration is to market Federal hydroelectric resources. Activities include the management of a safe, efficient, and reliable power system; providing efficient energy management in an environmentally sound manner; marketing power at cost-based rates that repay operation, maintenance, power, and transmission service expenses; ensuring that the Federal power investment is repaid with interest; and assisting in repayment of the irrigation investment beyond the irrigator's ability to pay.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type

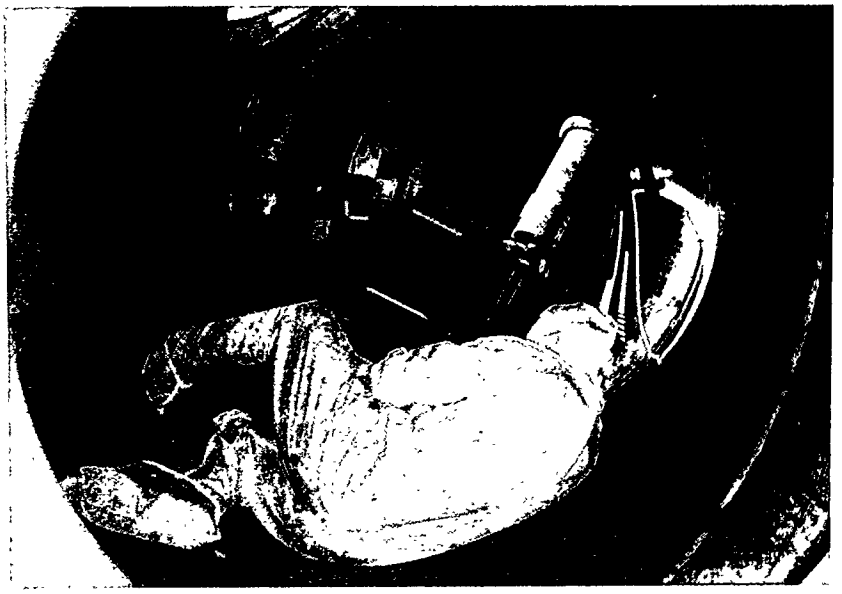


** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Oil-filled and polychlorinated biphenyl-containing equipment was replaced by low or no-oil non-polychlorinated biphenyl alternatives.
- Two new part cleaning machines were installed that use a nonhazardous solvent in smaller quantity.
- Two oil-filled circuit breakers were recycled, saving $375,000 to $750,000 in disposal costs.
- Materials recycled include office paper, packing materials, metal, oil, batteries, paint, aluminum cans, toner cartridges, corrugated cardboard, degreasing solvent, newspaper, and phone books.



A hazardous waste worker cleans the inside of the oil-filled breaker.

Materials Recycled by the Western Area Power Administration in 1994

Recycled Material	Western Area Power Administration *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	8	1,420
Metals	400	21,797
Paper	85	14,486
Other Materials*	515	18,574
GRAND TOTAL	*1,008*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Western Area Power Administration may be obtained by contacting:

Dee Adams
Western Area Power Administration
P.O. Box 3402, MS-A3400
Golden, CO 80401
303-275-1718, FAX 303-275-1727

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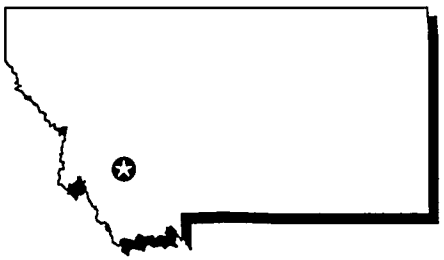
Waste Generation and Pollution Prevention Progress Fact Sheet

Western Environmental Technology Office



Western Environmental Technology Office – 1994

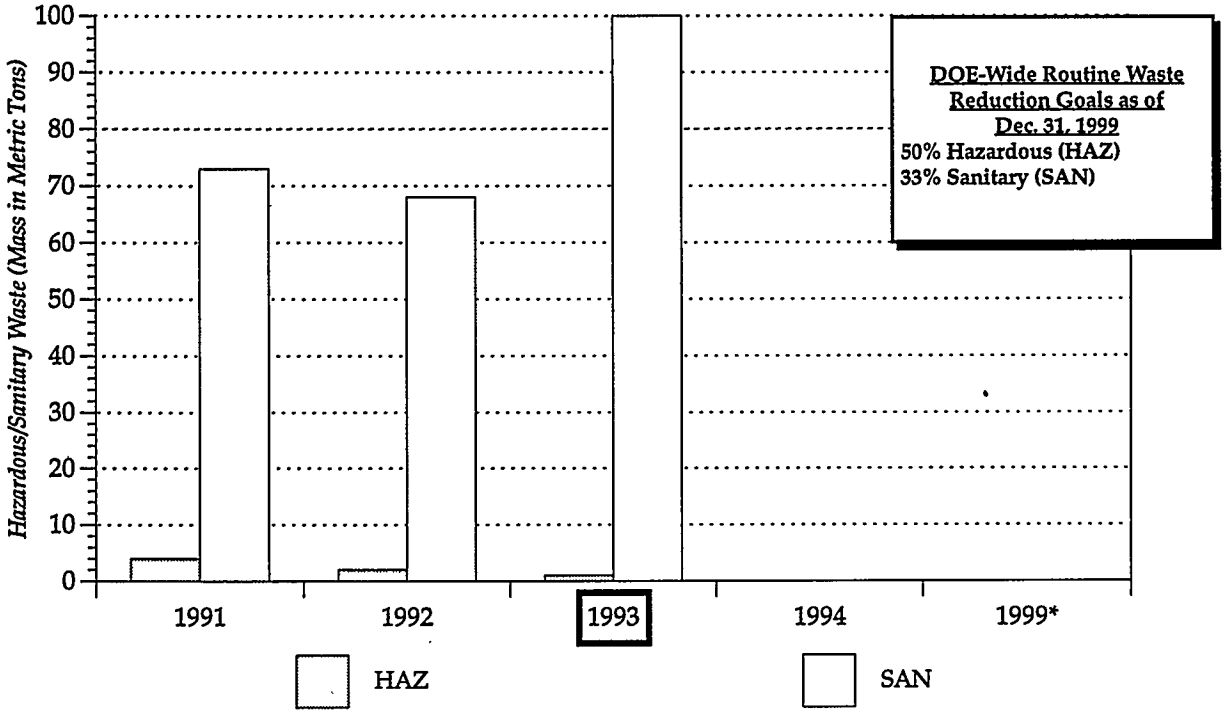
Location:	**Butte, Montana**
Site Size:	**53 Acres**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Fossil Energy**
DOE Employees:	**2**
Prime Contractor Employees:	**173**

Facility Mission

The mission of the Western Environmental Technology Office is to develop, test, and evaluate technologies for application in waste minimization, remediation, and energy activities. Current focus areas include hazardous waste vitrification, resource recovery, and mine waste remediation. Processes being tested include pilot and small scale Plasma Arc Furnaces, various technologies for recovering metals from contaminated water, and various technologies for remediating acidic minewater drainage.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type

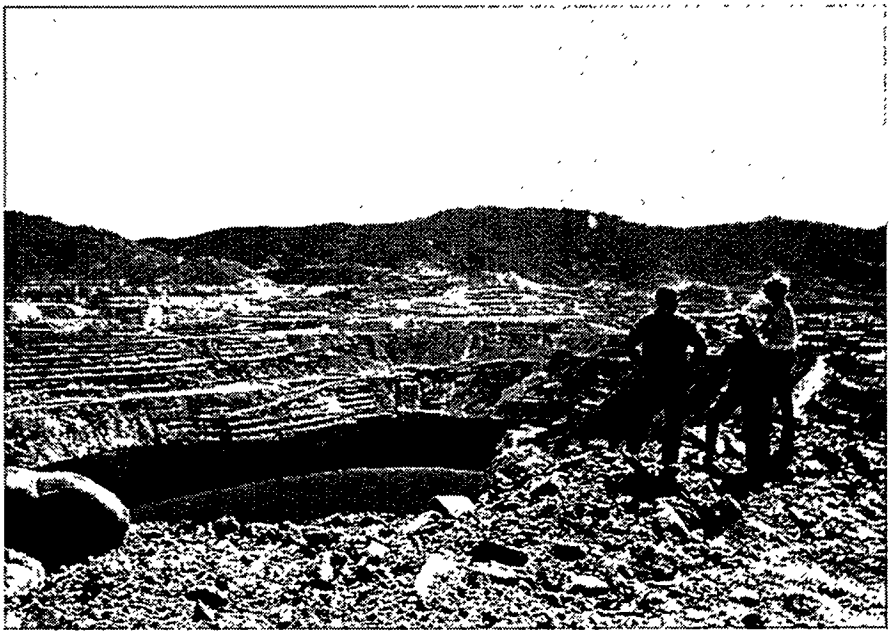


** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- A post-treatment water handling system was installed to treat the effluent water generated by Resource Recovery Project activities that recover metals from contaminated water. This system successfully treated approximately two metric tons of solid hazardous waste and 20 cubic meters of wastewater.
- Materials recycled include aluminum cans, office paper, toner cartridges, scrap metals, and used oil, although quantity records are not kept.



Containing approximately 25 billion gallons of resource-rich water, the Berkeley Pit serves as the test bed for the Resource Recovery Project.

Materials Recycled by the Western Environmental Technology Office in 1994

Recycled Material	Western Environmental Technology Office *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	not tracked	1,420
Metals	not tracked	21,797
Paper	not tracked	14,486
Other Materials*	not tracked	18,574
GRAND TOTAL	*not tracked*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Western Environmental Technology Office may be obtained by contacting:

Gene Ashby
Western Environmental Technology Office
P.O. Box 3462
Butte, MT 59701
406-494-7298, FAX 406-494-7290

Charles Brown
WETO Operations, MSE Inc.
P.O. Box 4078
Butte, MT 59701
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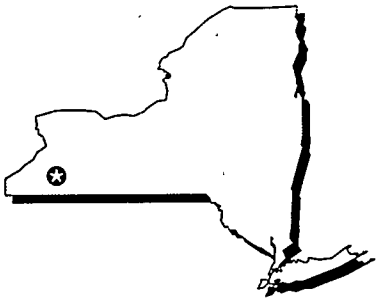
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

West Valley Demonstration Project



West Valley Demonstration Project – 1994

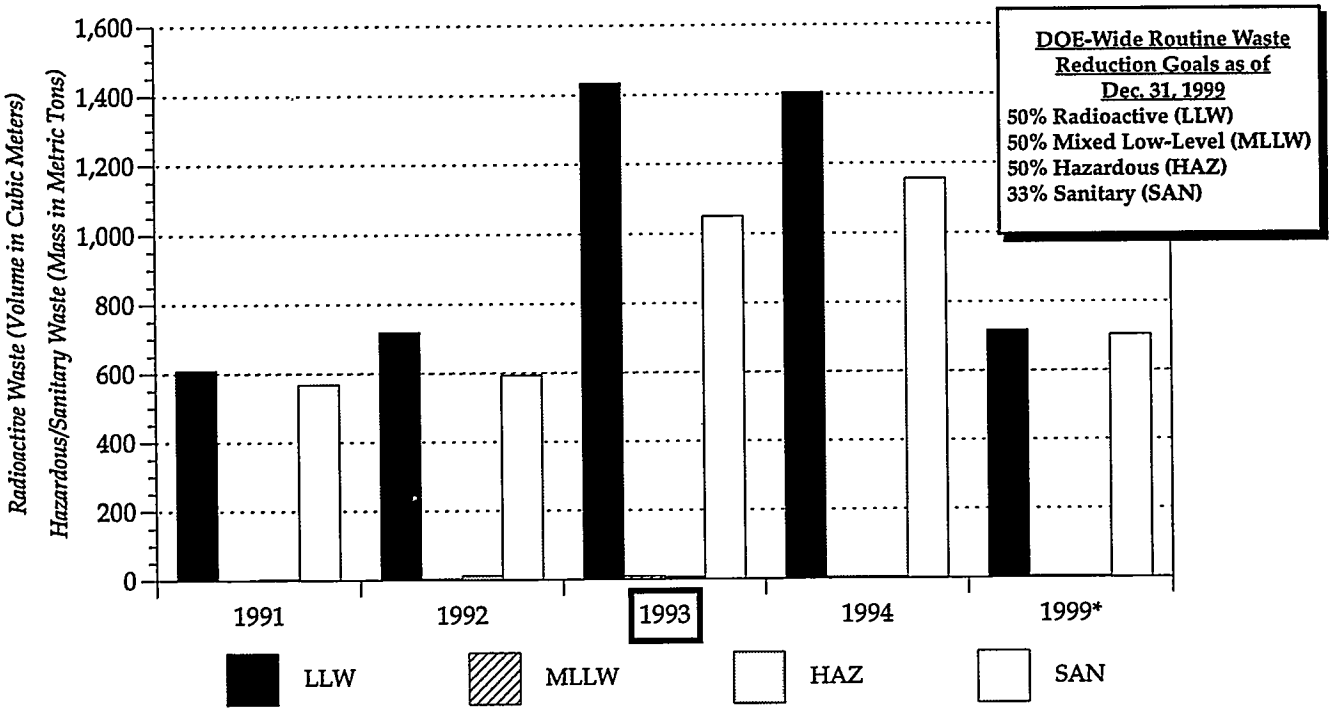
Location:	**West Valley, New York**
Site Size:	**200 Acres**
Operations Office:	**Ohio**
Lead Program Office:	**Environmental Management**
DOE Employees:	**24**
Prime Contractor Employees:	**1,134**

Facility Mission

The primary mission of the West Valley Demonstration Project is the construction, testing, start-up engineering, and operations associated with the vitrification facility.

(continued on page 2)

Routine Waste Generation and Projected Reduction by Waste Type



** 1999 reflects the application of DOE goals to the 1993 baseline.*

(continued from page 1)

1994 Pollution Prevention and Recycling Accomplishments

- Pretreatment of high-level waste in preparation for vitrification has reduced the volume of sludge generated by 214 cubic meters. The resulting low-level liquid, containing nitrate and sulfate salts, was concentrated, blended with cement, placed in steel drums, and stored in an above-ground shielded vault onsite.
- Three polychlorinated biphenyl capacitors were decontaminated and sent to a treatment facility for incineration, removing 0.436 metric tons of material from the mixed Toxic Substances Control Act regulated hazardous waste inventory.
- Contaminated tools were decontaminated for reuse, avoiding 5.9 cubic meters of low-level radioactive waste.
- The Geoprobe sampling method avoided 13.1 cubic meters of low-level radioactive waste.
- Glass making chemicals from experimental testing were reused by the Vitrification Test Facility, avoiding 0.5 metric tons of hazardous waste.
- The demolition of a radioactively contaminated structure resulted in the segregation, decontamination, and recycling of 15.9 cubic meters of metal.
- Reused contaminated lead for shielding in radiologically controlled storage areas.
- Paper recycling increased 70 percent in 1994, avoiding 138 metric tons of sanitary waste.
- Recycling of steel, aluminum, toner cartridges, light ballasts, clay, oil, batteries, cardboard boxes, styrofoam packing materials, and wooden pallets avoided 94 metric tons of sanitary waste.

Materials Recycled by the West Valley Demonstration Project in 1994

Recycled Material	West Valley Demonstration Project *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	1	1,420
Metals	82	21,797
Paper	138	14,486
Other Materials*	7	18,574
GRAND TOTAL	*228*	*56,277*

* *Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.*

The **Waste Generation and Pollution Prevention Progress Fact Sheet** is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the West Valley Demonstration Project may be obtained by contacting:

Don Hodge
U.S. Department of Energy, Ohio Field Office
P.O. Box 3020
Miamisburg, OH 45343-3020
513-865-3622, FAX 513-865-4402

Ahmad M. Al-Daouk
West Valley Demonstration Project
P.O. Box 191, MS-WV37
West Valley, NY 14171
716-942-4629, FAX 716-942-4703

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Office of Environmental Management

APPENDICES

Appendix A

DOE Site Listing

Operational Program Acronym

CR	Chief Financial Officer
DP	Defense Programs
EE	Energy Efficiency and Renewable Energy
EM	Environmental Management
ER	Energy Research
ET	Office of Science Education and Technical Information
FE	Office of Fossil Energy
HR	Human Resources and Administration
NE	Nuclear Energy
NN	Office of Nonproliferation and National Security
PM	Power Marketing Administration
RW	Office of Civilian Radioactive Waste Management

Operations Office Acronym

AL	Albuquerque
CH	Chicago
HQ	Headquarters
ID	Idaho
NV	Nevada
OAK	Oakland
OH	Ohio
OR	Oak Ridge
RF	Rocky Flats
RL	Richland
SR	Savannah River

DOE Sites	*Operational Program*	*Operations Office*
Reporting Sites		
Ames Laboratory - Ames, IA	ER	CH
Argonne National Laboratory–East - Argonne, IL	ER	CH
Argonne National Laboratory–West - Idaho Falls, ID	NE	CH
Battelle Columbus Laboratories - Columbus, OH	EM	CH
Bonneville Power Administration - Portland, OR	PM	HQ
Brookhaven National Laboratory - Upton, NY	ER	CH
Energy Technology Engineering Center - Canoga Park, CA	EM	OAK
Fermi National Accelerator Laboratory - Batavia, IL	ER	CH
Fernald Environmental Management Project - Fernald, OH	EM	OH
Formerly Utilized Sites Remedial Action Program	EM	OR
Program Management Office - Oak Ridge, TN		
Albany Metallurgical Research Center - Albany, OR		
Colonie Interim Storage Site - Colonie, NY		
Elza Gate Site - Oak Ridge, TN		
Hanford Site - Richland, WA	EM	RL
Hanford Environmental Health Foundation - Richland, WA		
Kaiser Engineering - Richland, WA		
Idaho National Engineering Laboratory - Idaho Falls, ID	EM	ID
Inhalation Toxicology Research Institute - Albuquerque, NM	ER	AL
Kansas City Plant - Kansas City, MO	DP	AL
Lawrence Berkeley National Laboratory - Berkeley, CA	ER	OAK
Lawrence Livermore National Laboratory - Livermore, CA	DP	OAK
Los Alamos National Laboratory - Los Alamos, NM	DP	AL
Mound Plant - Miamisburg, OH	EM	OH
Nevada Test Site - Mercury, NV	DP	NV
Raytheon Services Nevada, NTS Operations		
Reynolds Electrical & Engineering Co.		
Sandia National Laboratories, NTS Operations		
Wachenhut, NTS Operations		
North Las Vegas Facility - North Las Vegas, NV	DP	NV
EG&G/Energy Measurements:		
Amador Valley - Pleasanton, CA		

DOE Sites	Operational Program	Operations Office
Kirtland Air Force Base - Albuquerque, NM		
Los Alamos Operations - Los Alamos, NM		
Remote Sensing Laboratory - Nellis Air Force Base, NV		
Santa Barbara Operations - Santa Barbara, CA		
Special Technologies Laboratory - Santa Barbara, CA		
Washington Aerial Measurements Department, Andrews Air Force Base - Camp Springs, MD		
Woburn Court - Woburn, MA		
Oak Ridge K-25 Site - Oak Ridge, TN	EM	OR
Oak Ridge National Laboratory - Oak Ridge, TN	ER	OR
Oak Ridge Y-12 Plant - Oak Ridge, TN	DP	OR
Pacific Northwest National Laboratory - Richland, WA	ER	RL
Paducah Gaseous Diffusion Plant - Paducah, KY	EM	OR
Pantex Plant - Amarillo, TX	DP	AL
Pinellas Plant - Largo, FL	DP	AL
Pittsburgh Energy Technology Center - Pittsburgh, PA	FE	HQ
Portsmouth Gaseous Diffusion Plant - Piketon, OH	EM	OR
Princeton Plasma Physics Laboratory - Princeton, NJ	ER	CH
Rocky Flats Environmental Technology Site - Golden, CO	EM	RF
Sandia National Laboratories/California - Livermore, CA	DP	AL
Sandia National Laboratories/New Mexico - Albuquerque, NM	DP	AL
Savannah River Site - Aiken, SC	DP	SR
Stanford Linear Accelerator Center - Stanford, CA	ER	OAK
Weldon Spring Site Remedial Action Project - St. Charles, MO	EM	OR
West Valley Demonstration Project - West Valley, NY	EM	OH
Western Area Power Administration - Golden, CO	PM	HQ
Western Environmental Technology Office - Butte, MT	FE	HQ

Non-Reporting Sites

Alaska Power Administration - Juneau, AK	PM	HQ
Atomics International - Canoga Park, CA	EM	OAK
Bates Linear Accelerator Laboratory - Boston, MA	ER	CH
Butte Project Office - Butte, MT	FE	ID
California Institute of Technology - Pasadena, CA	ER	OAK
Center for Energy and Environmental Research - Mayaguez, PR	EM	OR
Central Training Academy - Albuquerque, NM	DP	AL
Cheltenham Secom Site - Cheltenham, MD	DP	AL
Continuous Electron Beam Accelerator Facility - Newport News, VA	ER	HQ
DOE Washington Headquarters	HR	HQ
Forrestal Building - Washington, DC		
Germantown Building - Germantown, MD		
Trevion Building - Germantown, MD		
Environmental Measurements Laboratory - New York, NY	ER	CH
Fast Flux Test Facility - Richland, WA	NE	RL
Fields Brook Site - Ashtabula, OH	EM	OR
Formerly Utilized Sites Remedial Action Program	EM	OR
Program Management Office - Oak Ridge, TN		
Acid/Pueblo Canyon - Los Alamos, NM		
Albany Metallurgical Research Center - Albany, OR		
Aliquippa Forge - Aliquippa, PA		
Ashland Oil Co. #1 - Tonawanda, NY		
Ashland Oil Co. #2 - Tonawanda, NY		
Associate Aircraft - Fairfield, OH		
B&L Steel - Buffalo, NY		
B&T Metals - Columbus, OH		
Baker and Williams Warehouse - New York, NY		

Operational Program Acronym

CR	Chief Financial Officer
DP	Defense Programs
EE	Energy Efficiency and Renewable Energy
EM	Environmental Management
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ET	Office of Science Education and Technical Information
FE	Office of Fossil Energy
HR	Human Resources and Administration
NE	Nuclear Energy
NN	Office of Nonproliferation and National Security
PM	Power Marketing Administration
RW	Office of Civilian Radioactive Waste Management

Operations Office Acronym

AL	Albuquerque
CH	Chicago
HQ	Headquarters
ID	Idaho
NV	Nevada
OAK	Oakland
OH	Ohio
OR	Oak Ridge
RF	Rocky Flats
RL	Richland
SR	Savannah River

Operational Program Acronym

CR	Chief Financial Officer
DP	Defense Programs
EE	Energy Efficiency and Renewable Energy
EM	Environmental Management
ER	Energy Research
ET	Office of Science Education and Technical Information
FE	Office of Fossil Energy
HR	Human Resources and Administration
NE	Nuclear Energy
NN	Office of Nonproliferation and National Security
PM	Power Marketing Administration
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Operations Office Acronym

AL	Albuquerque
CH	Chicago
HQ	Headquarters
ID	Idaho
NV	Nevada
OAK	Oakland
OH	Ohio
OR	Oak Ridge
RF	Rocky Flats
RL	Richland
SR	Savannah River

DOE Sites	*Operational Program*	*Operations Office*
Baker Brothers - Toledo, OH		
Bayo Canyon - Los Alamos, CA		
Chapman Valve - Indian Orchard, MA		
Chupadera Mesa - White Sands, NM		
DuPont & Company - Deepwater, NJ		
Elza Gate Site - Oak Ridge, TN		
General Motors - Adrian, MI		
Granite City Steel - Granite City, IL		
Kellex/Pierpoint - Jersey City, NJ		
Latty Avenue Properties - Hazelwood, MO		
Lewiston Storage Site - Niagara Falls, NY		
Linde Center - Tonawanda, NY		
Luckey Site - Luckey, OH		
Madison Site - Madison, IL		
Maywood Interim Storage Site - Maywood, NJ		
Middlesex Municipal Landfill - Middlesex, NJ		
Middlesex Sampling Plant - Middlesex, NJ		
National Guard Armory - Chicago, IL		
New Brunswick Site - New Brunswick, NJ		
Niagara Falls Storage Site - Vicinity Properties - Lewiston, NY		
Oxford - Oxford, OH		
Painesville - Painesville, OH		
Seaway Industrial Park - Tonawanda, NY		
Seymour Specialty Wire - Seymour, CT		
Shpack Landfill - Norton, MA		
Springdale Site - Springdale, PA		
St. Louis Airport Storage Site - St. Louis, MO		
St. Louis Airport Storage Site Vicinity Properties - St. Louis, MO		
St. Louis Downtown Site - Mallinckrodt, Inc. - St. Louis, MO		
University of California - Berkeley, CA		
University of Chicago - Chicago, IL		
Ventron Corporation - Beverly, MA		
Wayne Interim Storage Site - Wayne, NJ		
W.R. Grace & Co. - Curtis Bay, MD		
General Electric Vallecitos Nuclear Center - Vallecitos, CA	EM	OAK
Grand Forks Energy Technology Center - Grand Forks, ND	FE	HQ
Grand Junction Projects Office - Grand Junction, CO	EM	AL
Hallam Nuclear Power Facility - Lincoln, NE	EM	CH
Johnston Atoll	EM	NV
Kansas City Secom Site - Kansas City, MO	DP	AL
Laboratory for Biomedical and Environmental Science - Los Angeles, CA	ER	OAK
Laboratory for Energy-Related Health Research - Davis, CA	EM	OAK
Laboratory for Radiobiology and Environmental Health - San Francisco, CA	ER	OAK
Liquefied Gaseous Fuels Spill Test Facility - Mercury, NV	FE	NV
Lynchburg Technology Center - Lynchburg, VA	DP	HQ
Magnetic Fusion Energy Computing Center	ER	–
Massachusetts Institute of Technology - Boston, MA	ER	CH
Maxey Flats - Hillsboro, KY	EM	OR
Morgantown Energy Technology Center - Morgantown, WV	FE	HQ
National Institute for Petroleum and Energy Research - Bartlesville, OK	FE	HQ
National Renewable Energy Laboratory - Golden, CO	EE	HQ
Naval Oil Shale Reserve No. 3 - Rifle, CO	FE	HQ
Naval Petroleum Reserve No. 1 - Tupman, CA	FE	HQ
Naval Petroleum Reserve No. 3 - Casper, WY	FE	HQ
Naval Petroleum & Oil Shale Reserves - Casper, WY	FE	HQ

DOE Sites	*Operational Program*	*Operations Office*
Naval Oil Shale Reserve No. 1 - Carbon, CO		
Naval Oil Shale Reserve No. 2 - Uintah, UT		
Naval Petroleum Reserve No. 2 - Buena Vista, CA		
Nevada Offsite Locations Program - Mercury, NV	EM	NV
Amchitka Island Test Site - Amchitka Island, AK		
Central Nevada Test Area - Faultless, NV		
Project Chariot - Cape Thompson, AK		
Project Gasbuggy Site - Farmington, NM		
Project Gnome Site - Carlsbad, NM		
Project Rio Blanco Site - Rifle, CO		
Project Rulison Site - Grand Valley, CO		
Project Shoal Site - Fallon, NV		
Tatum Dome - Hattiesburg, MS		
Nevada Test Site (NTS) - Mercury, NV	DP	NV
Defense Nuclear Agency, NTS Operations		
Los Alamos National Laboratory, NTS Operations		
Lawrence Livermore National Laboratory, NTS Operations		
Notre Dame Radiation Laboratory - Notre Dame, IN	ER	CH
Oak Ridge Institute for Science and Education - Oak Ridge, TN	ER	OR
Office of Scientific and Technical Information - Oak Ridge, TN	ET	HQ
Oxnard Facility - Oxnard, CA	DP	RF
Piqua Nuclear Power Facility - Piqua, OH	EM	CH
RMI Decommissioning Project - Ashtabula, OH	EM	CH
Ross Aviation - Albuquerque, NM	DP	AL
Sandia Laboratories - Cape Canaveral, FL	DP	AL
Sandia Laboratories - Holloman AFB, Alamogordo, NM	DP	AL
Sandia Laboratories - Pacific Missile Range - Kauai, HI	DP	AL
Sandia Laboratories - Vernal, UT	DP	AL
Savannah River Site - Savannah River Ecology Laboratory - Aiken, SC	DP	SR
Savannah River Technology Center - Aiken, SC	DP	SR
Schnectady Naval Reactors Office - Schnectady, NY	NE	HQ
Separations Process Research Unit - Niskayuna, NY	EM	CH
Shippingport Station Decommissioning Project - Shippingport, PA	EM	RL
Site A/Plot M - Palos Park Forest Preserve, Cook County, IL	EM	CH
South Valley Site - Albuquerque, NM	EM	AL
Southeastern Power Administration - Atlanta, GA	PM	HQ
Southwestern Power Administration - Tulsa, OK	PM	HQ
Stanford Synchrotron Radiation Laboratory - Stanford, CA	ER	OAK
Strategic Petroleum Reserve Office - New Orleans, LA	FE	HQ
Strategic Petroleum Reserve Office - Bayou Choctow, LA		
Strategic Petroleum Reserve Office - Big Chill, LA		
Strategic Petroleum Reserve Office - Bryan Mound, LA		
Strategic Petroleum Reserve Office - New Orleans, LA		
Strategic Petroleum Reserve Office - St. James Terminal, LA		
Strategic Petroleum Reserve Office - Sulfur Mines, LA		
Strategic Petroleum Reserve Office - Week Island, LA		
Strategic Petroleum Reserve Office - West Hackberry, LA		
Superconducting Super Collider Laboratory - Dallas, TX	ER	OR
Uranium Mill Tailings Remedial Action (UMTRA)		
Project Office - Albuquerque, NM	EM	AL
UMTRA - Ambrosia Lake, NM		
UMTRA - Belfield, ND		
UMTRA - Bowman, ND		
UMTRA - Canonsburg, PA		
UMTRA - Durango, CO		
UMTRA - Falls City, TX		
UMTRA - Grand Junction, CO		

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DOE Sites	Operational Program	Operations Office
UMTRA - Green River, UT		
UMTRA - Gunnison, CO		
UMTRA - Lakeview, OR		
UMTRA - Lowman, ID		
UMTRA - Maybell, CO		
UMTRA - Mexican Hat, UT		
UMTRA - Monument Valley, AZ		
UMTRA - Naturita, CO		
UMTRA - Rifle, CO		
UMTRA - Riverton, WY		
UMTRA - Salt Lake City, UT		
UMTRA - Shiprock, NM		
UMTRA - Slick Rock, CO		
UMTRA - Spook, WY		
UMTRA - Tuba City, AZ		
Waste Isolation Pilot Plant - Carlsbad, NM	EM	AL
Yucca Mountain Site Characterization Project - Las Vegas, NV	RW	HQ

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Appendix B

DOE COMPLEX-WIDE DATA

This Appendix presents 1994 waste generation quantities for each reporting site within the DOE complex. Data is presented in a tabular format by waste type, program, and waste category (routine operations or cleanup/stabilization) for each reporting site.

Radioactive, mixed, and hazardous waste quantities are listed by waste category and program for each reporting site beginning on page B-28.

Sanitary waste totals for each reporting site are listed on page B-40, and process wastewater totals are listed on page B-41.

Changes to data reported in prior editions of this Report are listed on page B-42. ■

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1994 Site Waste Generation
High-Level Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Savannah River Site	Routine	0.00	1726.83	0.00	37.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1764.14
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	1726.83	0.00	37.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1764.14
2. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	307.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	307.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	307.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	307.00
Totals for waste type	Routine	0.00	1726.83	0.00	344.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2071.14
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	1726.83	0.00	344.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2071.14

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Transuranic Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Savannah River Site	Routine	0.00	113.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	113.72
	Cleanup	0.00	171.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	171.60
	Total	0.00	285.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	285.32
2. Hanford Site	Routine	0.00	0.00	0.00	195.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	195.48
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	195.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	195.48
3. Los Alamos National Laboratory	Routine	0.00	50.80	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.00	66.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	50.80	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.00	66.80
4. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	0.00	24.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.24
	Cleanup	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
	Total	0.00	0.00	0.00	0.85	24.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.09
5. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.21
	Cleanup	0.00	0.00	0.00	15.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.94
	Total	0.00	0.00	0.00	20.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.15
6. Lawrence Livermore National Laboratory	Routine	0.00	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.63
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.63
7. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.03	1.59	0.00	0.00	0.00	3.65	0.00	0.00	0.00	5.27
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.03	1.59	0.00	0.00	0.00	3.65	0.00	0.00	0.00	5.27
8. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.90
	Total	0.00	0.00	0.00	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.90
9. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66

Data provided by the DOE reporting sites.

1994 Site Waste Generation
Transuranic Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.80
11. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
Totals for waste type	Routine	0.00	170.15	0.00	199.72	27.71	0.00	0.00	0.00	20.45	0.00	0.00	0.00	418.03
	Cleanup	0.00	171.60	0.00	19.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	191.29
	Total	0.00	341.75	0.00	219.41	27.71	0.00	0.00	0.00	20.45	0.00	0.00	0.00	609.32

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Mixed Transuranic Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Hanford Site	Routine	0.00	0.00	0.00	102.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	102.12
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	102.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	102.12
2. Savannah River Site	Routine	0.00	22.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.39
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	22.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.39
3. Los Alamos National Laboratory	Routine	0.00	14.20	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.20
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	14.20	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.20
4. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	4.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.13
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	4.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.13
5. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60
6. Lawrence Livermore National Laboratory	Routine	0.00	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
7. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
8. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	0.28	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.28	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
Totals for waste type	Routine	0.00	37.63	0.00	112.13	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	150.13
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	37.63	0.00	112.13	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	150.13

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Low-Level Radioactive Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	583.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	583.10
	Cleanup	0.00	0.00	0.00	30048.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30048.82
	Total	0.00	0.00	0.00	30631.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30631.92
2. Savannah River Site	Routine	0.00	4075.84	0.00	2774.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6850.04
	Cleanup	0.00	1174.32	0.00	229.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1403.82
	Total	0.00	5250.16	0.00	3003.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8253.86
3. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	60.32	0.00	0.00	0.00	0.00	2276.16	0.00	0.00	0.00	2336.48
	Cleanup	0.00	0.00	0.00	42.26	906.77	0.00	0.00	0.00	1414.31	0.00	0.00	0.00	2363.34
	Total	0.00	0.00	0.00	102.58	906.77	0.00	0.00	0.00	3690.47	0.00	0.00	0.00	4699.82
4. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	907.00	2306.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3213.00
	Cleanup	0.00	0.00	0.00	1310.00	147.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1457.00
	Total	0.00	0.00	0.00	2217.00	2453.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4670.00
5. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	1192.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1192.00
	Cleanup	0.00	0.00	0.00	3236.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	3239.30
	Total	0.00	0.00	0.00	4428.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	4431.30
6. Hanford Site	Routine	0.00	0.00	0.00	3903.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3903.95
	Cleanup	0.00	0.00	0.00	218.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	218.32
	Total	0.00	0.00	0.00	4122.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4122.27
7. Los Alamos National Laboratory	Routine	0.00	1450.00	0.00	239.00	47.30	0.00	0.00	0.00	19.80	0.00	0.00	2.04	1758.14
	Cleanup	0.00	33.40	0.00	1030.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40	1071.80
	Total	0.00	1483.40	0.00	1269.00	47.30	0.00	0.00	0.00	19.80	0.00	0.00	10.44	2829.94
8. Mound Plant	Routine	0.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2800.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2800.00
9. Oak Ridge Y-12 Plant	Routine	0.00	1885.07	0.00	181.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2066.97
	Cleanup	0.00	0.00	0.00	36.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.81
	Total	0.00	1885.07	0.00	218.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2103.78

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Low-Level Radioactive Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Ames Laboratory	Routine	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
	Cleanup	0.00	0.00	0.00	1608.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1608.25
	Total	0.00	0.00	0.00	1608.25	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1610.25
11. Battelle Columbus Laboratories	Routine	0.00	0.00	0.00	901.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	901.38
	Cleanup	0.00	0.00	0.00	600.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	600.91
	Total	0.00	0.00	0.00	1502.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1502.29
12. West Valley Demonstration Project	Routine	0.00	0.00	0.00	1404.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1404.86
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	1404.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1404.86
13. Formerly Utilized Sites Remedial Action Program	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	1247.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1247.00
	Total	0.00	0.00	0.00	1247.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1247.00
14. Portsmouth Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	1230.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1230.19
	Total	0.00	0.00	0.00	1230.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1230.19
15. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	7.36	273.23	0.00	0.00	0.00	197.41	0.00	0.00	0.00	478.00
	Cleanup	0.00	0.00	0.00	340.79	95.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	435.98
	Total	0.00	0.00	0.00	348.15	368.42	0.00	0.00	0.00	197.41	0.00	0.00	0.00	913.98
16. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	582.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	582.20
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	582.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	582.20
17. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	461.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	461.43
	Cleanup	0.00	0.00	0.00	78.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.45
	Total	0.00	0.00	0.00	539.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	539.88
18. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	14.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.15
	Cleanup	0.00	0.00	0.00	0.00	516.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	516.07
	Total	0.00	0.00	0.00	0.00	530.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	530.22

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Low-Level Radioactive Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	441.00	0.00	0.00	0.00	441.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	441.00	0.00	0.00	0.00	441.00
20. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	229.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	229.21
	Cleanup	0.00	0.00	0.00	0.00	54.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.36
	Total	0.00	0.00	0.00	0.00	283.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	283.57
21. Pantex Plant	Routine	0.00	264.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	264.80
	Cleanup	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	Total	0.00	264.80	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	265.00
22. Lawrence Livermore National Laboratory	Routine	0.00	119.05	0.00	12.16	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	133.79
	Cleanup	0.00	2.85	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91
	Total	0.00	121.90	0.00	12.17	2.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	136.70
23. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	116.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	116.00
	Total	0.00	0.00	0.00	116.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	116.00
24. Nevada Test Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	87.96	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.87
	Total	0.00	87.96	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.87
25. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	81.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.30
	Cleanup	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Total	0.00	0.00	0.00	0.00	81.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.31
26. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	63.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.64
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	63.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.64
27. Sandia National Laboratories/California	Routine	0.00	6.50	0.00	0.50	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00
	Cleanup	0.00	32.30	0.00	2.48	14.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.69
	Total	0.00	38.80	0.00	2.98	17.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.69

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Low-Level Radioactive Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
28. Sandia National Laboratories/New Mexico	Routine	0.50	48.53	0.00	1.11	0.00	0.00	0.00	0.00	3.50	0.51	0.00	0.00	54.15
	Cleanup	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	Total	0.53	48.53	0.00	1.11	0.00	0.00	0.00	0.00	3.50	0.51	0.00	0.00	54.18
29. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	25.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.42
	Cleanup	0.00	0.00	0.00	21.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.51
	Total	0.00	0.00	0.00	46.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.93
30. Pinellas Plant	Routine	0.00	46.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.70
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	46.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.70
31. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	21.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.15
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	21.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.15
32. Kansas City Plant	Routine	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	Cleanup	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
	Total	0.00	0.20	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
Totals for waste type	Routine	0.50	7896.69	0.00	15455.69	3625.76	0.00	0.00	0.00	2937.87	0.51	0.00	2.04	29919.06
	Cleanup	0.03	1330.83	0.00	41398.51	1734.36	0.00	0.00	0.00	1417.61	0.00	0.00	8.40	45889.74
	Total	0.53	9227.52	0.00	56854.20	5360.12	0.00	0.00	0.00	4355.48	0.51	0.00	10.44	75808.80

Data provided by the DOE reporting sites.

1994 Site Waste Generation
Low-Level Mixed Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	386.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	386.00
	Cleanup	0.00	0.00	0.00	6693.50	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	6694.56
	Total	0.00	0.00	0.00	7079.50	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	7080.56
2. Hanford Site	Routine	0.00	0.00	0.00	570.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	570.26
	Cleanup	0.00	0.00	0.00	1737.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1737.40
	Total	0.00	0.00	0.00	2307.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2307.66
3. Portsmouth Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	1787.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1787.00
	Total	0.00	0.00	0.00	1787.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1787.00
4. Savannah River Site	Routine	0.00	740.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	740.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	740.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	740.80
5. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	22.41	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	22.42
	Cleanup	0.00	0.00	0.00	321.80	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	321.90
	Total	0.00	0.00	0.00	344.21	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	344.32
6. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	341.04	0.00	0.00	0.00	341.04
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	341.04	0.00	0.00	0.00	341.04
7. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	274.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	274.92
	Cleanup	0.00	0.00	0.00	12.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.84
	Total	0.00	0.00	0.00	287.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	287.76
8. Oak Ridge Y-12 Plant	Routine	0.00	149.93	0.00	91.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	241.49
	Cleanup	0.00	5.63	0.00	14.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.66
	Total	0.00	155.56	0.00	105.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	261.15
9. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	84.76	38.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	123.11
	Cleanup	0.00	0.00	0.00	1.49	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56
	Total	0.00	0.00	0.00	86.25	38.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	124.67

Data provided by the DOE reporting sites.

1994 Site Waste Generation
Low-Level Mixed Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Paducah Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	82.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.57
	Total	0.00	0.00	0.00	82.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.57
11. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.53
	Cleanup	0.00	0.00	0.00	80.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.32
	Total	0.00	0.00	0.00	81.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.85
12. Los Alamos National Laboratory	Routine	0.00	19.90	0.00	4.40	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.33
	Cleanup	0.00	6.83	0.00	44.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.43
	Total	0.00	26.73	0.00	49.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.76
13. Nevada Test Site	Routine	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
	Cleanup	0.00	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.10
	Total	0.00	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.60
14. Pantex Plant	Routine	0.00	27.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.67
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	27.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.67
15. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.80
16. Lawrence Livermore National Laboratory	Routine	0.00	4.94	0.00	11.71	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.29
	Cleanup	0.00	8.38	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40
	Total	0.00	13.32	0.00	11.71	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69
17. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.00	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.80
18. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	6.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.57
	Cleanup	0.00	0.00	0.00	0.00	10.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.86
	Total	0.00	0.00	0.00	0.00	17.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.43

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Low-Level Mixed Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Formerly Utilized Sites Remedial Action Program	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.10
	Total	0.00	0.00	0.00	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.10
20. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.08
	Cleanup	0.00	0.00	0.00	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.20
	Total	0.00	0.00	0.00	7.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.28
21. Battelle Columbus Laboratories	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.90
	Total	0.00	0.00	0.00	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.90
22. West Valley Demonstration Project	Routine	0.00	0.00	0.00	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.62
	Cleanup	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
	Total	0.00	0.00	0.00	4.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.98
23. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04
24. Sandia National Laboratories/California	Routine	0.00	1.42	0.00	0.10	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18
	Cleanup	0.00	0.97	0.00	0.07	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49
	Total	0.00	2.39	0.00	0.17	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.67
25. Sandia National Laboratories/New Mexico	Routine	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	1.93
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	1.93
26. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
27. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
	Total	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86

Data provided by the DOE reporting sites.

1994 Site Waste Generation
Low-Level Mixed Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
28. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
Totals for waste type	Routine	0.00	946.88	0.00	1454.35	96.50	0.00	0.00	0.00	341.26	0.00	0.00	0.00	2838.99
	Cleanup	0.00	52.91	0.00	10800.04	11.40	0.00	0.00	0.00	1.16	0.00	0.00	0.00	10865.51
	Total	0.00	999.79	0.00	12254.39	107.90	0.00	0.00	0.00	342.42	0.00	0.00	0.00	13704.50

Data provided by the DOE reporting sites.

1994 Site Waste Generation

RCRA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	2219.76	0.00	0.00	0.00	0.00	13.14	0.00	0.00	0.00	2232.90
	Cleanup	0.00	0.00	0.00	9.03	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00	10.01
	Total	0.00	0.00	0.00	2228.79	0.00	0.00	0.00	0.00	14.12	0.00	0.00	0.00	2242.91
2. Paducah Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	407.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	407.35
	Total	0.00	0.00	0.00	407.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	407.35
3. Hanford Site	Routine	0.00	0.00	0.00	70.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.92
	Cleanup	0.00	0.00	0.00	285.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	285.07
	Total	0.00	0.00	0.00	355.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	355.99
4. Lawrence Livermore National Laboratory	Routine	0.00	173.21	0.00	7.36	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	187.80
	Cleanup	0.00	27.90	0.00	10.84	6.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.61
	Total	0.00	201.11	0.00	18.20	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	233.41
5. Kansas City Plant	Routine	0.00	122.86	0.00	49.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	172.05
	Cleanup	0.00	0.00	0.00	27.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.23
	Total	0.00	122.86	0.00	76.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	199.28
6. Los Alamos National Laboratory	Routine	0.00	20.00	0.31	11.00	0.98	0.00	0.07	0.00	0.47	0.00	0.00	0.06	32.89
	Cleanup	0.00	6.11	0.06	96.50	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	102.73
	Total	0.00	26.11	0.37	107.50	1.04	0.00	0.07	0.00	0.47	0.00	0.00	0.06	135.62
7. Sandia National Laboratories/New Mexico	Routine	3.82	36.87	2.27	6.83	0.11	0.00	0.42	0.00	0.00	0.45	0.00	0.00	50.77
	Cleanup	0.00	0.09	0.00	30.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.05
	Total	3.82	36.96	2.27	37.79	0.11	0.00	0.42	0.00	0.00	0.45	0.00	0.00	81.82
8. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00
	Cleanup	0.00	0.00	0.00	0.00	60.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.30
	Total	0.00	0.00	0.00	0.00	80.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.30
9. Savannah River Site	Routine	0.00	73.37	0.00	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.13
	Cleanup	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
	Total	0.00	73.37	0.00	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.69

Data provided by the DOE reporting sites.

1994 Site Waste Generation

RCRA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Nevada Test Site	Routine	0.00	30.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.80
	Cleanup	0.00	8.00	0.00	38.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.00
	Total	0.00	38.80	0.00	38.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.80
11. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	64.72	7.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.16
	Cleanup	0.00	0.00	0.00	3.67	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.68
	Total	0.00	0.00	0.00	68.39	7.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.84
12. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	72.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	72.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00
13. Pantex Plant	Routine	0.00	60.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.34
	Cleanup	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
	Total	0.00	60.34	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.09
14. Pinellas Plant	Routine	0.00	60.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.90
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	60.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.90
15. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.00	25.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.52
	Cleanup	0.00	0.00	0.00	0.00	30.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.10
	Total	0.00	0.00	0.00	0.00	55.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.62
16. Rocky Flats Environmental Technology Site	Routine	0.00	0.65	0.00	8.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.89
	Cleanup	0.00	0.51	0.00	42.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.38
	Total	0.00	1.16	0.00	51.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.27
17. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	4.18	4.09	37.79	0.00	0.43	0.00	0.00	0.00	0.00	0.61	47.10
	Cleanup	0.00	0.00	0.03	0.11	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.92
	Total	0.00	0.00	4.21	4.20	42.57	0.00	0.43	0.00	0.00	0.00	0.00	0.61	52.02
18. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	41.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	41.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.00

Data provided by the DOE reporting sites.

1994 Site Waste Generation

RCRA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Mound Plant	Routine	0.00	0.00	0.00	33.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.74
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	33.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.74
20. North Las Vegas Facility	Routine	0.00	22.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.85
	Cleanup	0.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50
	Total	0.00	30.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.35
21. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	12.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.12
	Cleanup	0.00	0.00	0.00	0.00	15.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.51
	Total	0.00	0.00	0.00	0.00	27.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.63
22. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.10	0.00	0.00	0.00	19.10
	Cleanup	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.02
	Total	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	21.10	0.00	0.00	0.00	21.12
23. Sandia National Laboratories/California	Routine	0.00	11.70	0.00	0.90	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00
	Cleanup	0.00	0.19	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
	Total	0.00	11.89	0.00	0.91	5.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.29
24. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.34	0.00	15.34
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.34	0.00	15.34
25. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.10	0.00	0.00	0.00	10.10
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.10	0.00	0.00	0.00	10.10
26. Pittsburgh Energy Technology Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	6.45	0.00	0.00	0.00	0.00	0.00	6.45
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	0.00	1.63
	Total	0.00	0.00	0.00	0.00	0.00	0.00	8.08	0.00	0.00	0.00	0.00	0.00	8.08
27. Formerly Utilized Sites Remedial Action Program	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	7.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.26
	Total	0.00	0.00	0.00	7.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.26

Data provided by the DOE reporting sites.

1994 Site Waste Generation

RCRA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
28. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	7.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.21
	Total	0.00	0.00	0.00	7.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.21
29. Ames Laboratory	Routine	0.00	0.00	0.00	0.00	6.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.71
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	6.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.71
30. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	6.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.58
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	6.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.58
31. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.80
32. West Valley Demonstration Project	Routine	0.00	0.00	0.00	4.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.58
	Cleanup	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
	Total	0.00	0.00	0.00	4.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.72
33. Western Area Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.36	0.00	4.36
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.46	0.00	4.46
34. Western Environmental Technology Office	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.08
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.49
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.57
Totals for waste type	Routine	3.82	613.55	6.76	2485.09	247.68	0.00	7.45	0.00	42.81	0.45	19.70	0.67	3427.98
	Cleanup	0.00	50.30	0.09	967.58	117.72	0.00	2.12	0.00	2.98	0.00	0.10	0.00	1140.89
	Total	3.82	663.85	6.85	3452.67	365.40	0.00	9.57	0.00	45.79	0.45	19.80	0.67	4568.87

Data provided by the DOE reporting sites.

1994 Site Waste Generation

State Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Nevada Test Site	Routine	0.00	4410.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4410.00
	Cleanup	0.00	780.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	780.00
	Total	0.00	5190.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5190.00
2. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.00	2347.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2347.00
	Cleanup	0.00	0.00	0.00	0.00	196.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	196.00
	Total	0.00	0.00	0.00	0.00	2583.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2543.00
3. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2000.95	0.00	2000.95
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2000.95	0.00	2000.95
4. Los Alamos National Laboratory	Routine	0.00	169.00	0.18	64.20	1.13	0.00	0.07	0.00	0.04	0.00	0.00	0.03	234.65
	Cleanup	0.00	83.90	0.09	484.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	568.15
	Total	0.00	252.90	0.27	548.20	1.29	0.00	0.07	0.00	0.04	0.00	0.00	0.03	802.80
5. Sandia National Laboratories/New Mexico	Routine	3.83	74.18	0.42	27.40	1.74	0.00	1.68	0.00	0.00	0.42	0.00	0.00	109.67
	Cleanup	1.04	9.79	0.00	527.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	537.91
	Total	4.87	83.97	0.42	554.48	1.74	0.00	1.68	0.00	0.00	0.42	0.00	0.00	647.58
6. Western Area Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.82	0.00	117.82
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	377.91	0.00	377.91
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	495.73	0.00	495.73
7. Pantex Plant	Routine	0.00	243.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	243.21
	Cleanup	0.00	0.00	0.00	251.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	251.00
	Total	0.00	243.21	0.00	251.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	494.21
8. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.70	0.00	0.00	0.00	25.70
	Cleanup	0.00	0.00	0.00	431.00	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	440.00
	Total	0.00	0.00	0.00	431.00	0.00	0.00	0.00	0.00	34.70	0.00	0.00	0.00	465.70
9. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	29.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.80
	Cleanup	0.00	0.00	0.00	0.00	382.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	382.83
	Total	0.00	0.00	0.00	0.00	412.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	412.63

Data provided by the DOE reporting sites.

1994 Site Waste Generation

State Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Lawrence Livermore National Laboratory	Routine	0.00	168.12	0.00	12.43	17.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	198.48
	Cleanup	0.00	99.44	0.00	8.64	5.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	113.93
	Total	0.00	267.56	0.00	21.07	23.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	312.41
11. Hanford Site	Routine	0.00	0.00	0.00	137.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.87
	Cleanup	0.00	0.00	0.00	47.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.63
	Total	0.00	0.00	0.00	185.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	185.50
12. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	80.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.20
	Cleanup	0.00	0.00	0.00	0.00	42.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.00
	Total	0.00	0.00	0.00	0.00	122.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.20
13. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	4.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.48
	Cleanup	0.00	0.00	0.00	77.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.44
	Total	0.00	0.00	0.00	77.44	4.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.92
14. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	60.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.17
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	60.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.17
15. Paducah Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	56.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.74
	Total	0.00	0.00	0.00	56.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.74
16. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	4.03	3.90	33.57	0.00	0.42	0.00	0.00	0.00	0.00	0.71	42.63
	Cleanup	0.00	0.00	0.10	0.69	3.52	0.00	0.01	0.00	0.00	0.00	0.00	0.02	4.34
	Total	0.00	0.00	4.13	4.59	37.09	0.00	0.43	0.00	0.00	0.00	0.00	0.73	46.97
17. Pinellas Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	38.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.90
	Total	0.00	0.00	0.00	38.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.90
18. Sandia National Laboratories/California	Routine	0.00	12.80	0.00	0.98	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.69
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	12.80	0.00	0.98	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.69

Data provided by the DOE reporting sites.

1994 Site Waste Generation

State Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Kansas City Plant	Routine	0.00	18.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.97
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	18.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.97
20. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.70
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.70
21. Weldon Spring Site Remedial Action Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	3.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79
	Total	0.00	0.00	0.00	3.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79
22. Formerly Utilized Remedial Action Program	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.08
	Total	0.00	0.00	0.00	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.08
23. Ames Laboratory	Routine	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
Totals for waste type	Routine	3.83	5096.28	4.63	246.78	2595.72	0.00	2.17	0.00	25.74	0.42	2118.77	0.74	10095.08
	Cleanup	1.04	973.13	0.19	1929.99	630.36	0.00	0.01	0.00	9.00	0.00	377.91	0.02	3921.65
	Total	4.87	6069.41	4.82	2176.77	3226.08	0.00	2.18	0.00	34.74	0.42	2496.68	0.76	14016.73

Data provided by the DOE reporting sites.

1994 Site Waste Generation

TSCA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7017.30	0.00	7017.30
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7017.30	0.00	7017.30
2. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.00	2995.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2995.00
	Total	0.00	0.00	0.00	0.00	2995.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2995.00
3. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	806.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	806.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	806.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	806.00
4. Kansas City Plant	Routine	0.00	29.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.43
	Cleanup	0.00	276.10	0.00	13.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	289.79
	Total	0.00	305.53	0.00	13.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	319.22
5. Los Alamos National Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	152.00	0.44	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	169.54
	Total	0.00	152.00	0.44	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	169.54
6. Hanford Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	85.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.53
	Total	0.00	0.00	0.00	85.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.53
7. Western Area Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.24	0.00	63.24
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.60	0.00	18.60
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.84	0.00	81.84
8. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	41.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.96
	Cleanup	0.00	0.00	0.00	0.00	15.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.05
	Total	0.00	0.00	0.00	0.00	57.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.01
9. Savannah River Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	54.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.75
	Total	0.00	54.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.75

Data provided by the DOE reporting sites.

1994 Site Waste Generation

TSCA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Nevada Test Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	32.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.20
	Total	0.00	0.00	0.00	32.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.20
11. Lawrence Livermore National Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	22.67	0.00	1.01	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.20
	Total	0.00	22.67	0.00	1.01	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.20
12. Sandia National Laboratories/California	Routine	0.00	0.65	0.00	0.05	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	Cleanup	0.00	12.35	0.00	0.95	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.00
	Total	0.00	13.00	0.00	1.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00
13. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	6.28	12.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.14
	Total	0.00	0.00	0.00	6.28	12.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.14
14. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.09
	Cleanup	0.00	0.00	0.00	0.00	12.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83
	Total	0.00	0.00	0.00	0.00	16.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.92
15. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.89	2.35	6.77	0.00	0.10	0.00	0.00	0.00	0.00	0.17	10.28
	Total	0.00	0.00	0.89	2.35	6.77	0.00	0.10	0.00	0.00	0.00	0.00	0.17	10.28
16. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.00	10.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.15
	Total	0.00	0.00	0.00	0.00	10.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.15
17. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.51	0.00	0.00	0.00	7.51
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.51	0.00	0.00	0.00	7.51
18. Mound Plant	Routine	0.00	0.00	0.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.80

Data provided by the DOE reporting sites.

1994 Site Waste Generation

TSCA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Ames Laboratory	Routine	0.00	0.00	0.00	0.00	6.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.44
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	6.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.44
20. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	6.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.32
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	6.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.32
21. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.90
	Total	0.00	0.00	0.00	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.90
22. Pinellas Plant	Routine	0.00	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.62
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.62
23. Pantex Plant	Routine	0.00	4.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.23
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	4.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.23
24. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	0.00	0.00	0.00	2.70
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	0.00	0.00	0.00	2.70
25. West Valley Demonstration Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	Total	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
26. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05

Data provided by the DOE reporting sites.

1994 Site Waste Generation

TSCA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
27. Pittsburgh Energy Technology Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
Totals for waste type	Routine	0.00	38.93	0.00	13.17	858.84	0.00	0.02	0.00	7.51	0.00	63.24	0.00	981.71
	Cleanup	0.00	517.87	1.33	165.06	3058.88	0.00	0.10	0.00	2.70	0.00	7035.90	0.17	10782.01
	Total	0.00	556.80	1.33	178.23	3917.72	0.00	0.12	0.00	10.21	0.00	7099.14	0.17	11763.72

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Mixed TSCA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	1710.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1710.00
	Total	0.00	0.00	0.00	1710.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1710.00
2. Paducah Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	279.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	279.11
	Total	0.00	0.00	0.00	279.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	279.11
3. Portsmouth Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	88.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.40
	Total	0.00	0.00	0.00	88.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.40
4. Los Alamos National Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	12.20	0.00	35.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.10
	Total	0.00	12.20	0.00	35.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.10
5. Oak Ridge Y-12 Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	16.20	0.00	9.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.86
	Total	0.00	16.20	0.00	9.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.86
6. Weldon Spring Site Remedial Action Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	15.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.35
	Total	0.00	0.00	0.00	15.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.35
7. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	2.74	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	Total	0.00	0.00	0.00	2.74	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
8. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60
	Total	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60
9. Lawrence Livermore National Laboratory	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16
	Total	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Mixed TSCA Regulated Hazardous Waste (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Hanford Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
	Total	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
11. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
	Total	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
12. Battelle Columbus Laboratories	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
	Total	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
13. West Valley Demonstration Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
	Total	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
14. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Totals for waste type	Routine	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Cleanup	0.00	29.56	0.00	2146.12	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2176.94
	Total	0.00	29.56	0.00	2146.12	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2176.95

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Radioactive Waste (High-Level, Transuranic, Low-Level) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	583.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	583.10
	Cleanup	0.00	0.00	0.00	30048.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30048.82
	Total	0.00	0.00	0.00	30631.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30631.92
2. Savannah River Site	Routine	0.00	5916.39	0.00	2811.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8727.90
	Cleanup	0.00	1345.92	0.00	229.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1575.42
	Total	0.00	7262.31	0.00	3041.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10303.32
3. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	367.32	0.00	0.00	0.00	0.00	2276.16	0.00	0.00	0.00	2643.48
	Cleanup	0.00	0.00	0.00	42.26	906.77	0.00	0.00	0.00	1414.31	0.00	0.00	0.00	2363.34
	Total	0.00	0.00	0.00	409.58	906.77	0.00	0.00	0.00	3690.47	0.00	0.00	0.00	5006.82
4. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	907.00	2330.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3237.24
	Cleanup	0.00	0.00	0.00	1310.85	147.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1457.85
	Total	0.00	0.00	0.00	2217.85	2477.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4695.09
5. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	1192.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1192.00
	Cleanup	0.00	0.00	0.00	3236.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	3239.30
	Total	0.00	0.00	0.00	4428.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	4431.30
6. Hanford Site	Routine	0.00	0.00	0.00	4099.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4099.43
	Cleanup	0.00	0.00	0.00	218.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	218.32
	Total	0.00	0.00	0.00	4317.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4317.75
7. Los Alamos National Laboratory	Routine	0.00	1500.80	0.00	239.00	47.30	0.00	0.00	0.00	35.80	0.00	0.00	2.04	1824.94
	Cleanup	0.00	33.40	0.00	1030.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40	1071.80
	Total	0.00	1534.20	0.00	1269.00	47.30	0.00	0.00	0.00	35.80	0.00	0.00	10.44	2896.74
8. Mound Plant	Routine	0.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2800.00
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2800.00
9. Oak Ridge Y-12 Plant	Routine	0.00	1885.07	0.00	181.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2066.97
	Cleanup	0.00	0.00	0.00	36.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.81
	Total	0.00	1885.07	0.00	218.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2103.78

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Radioactive Waste (High-Level, Transuranic, Low-Level) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Ames Laboratory	Routine	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
	Cleanup	0.00	0.00	0.00	1608.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1608.25
	Total	0.00	0.00	0.00	1608.25	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1610.25
11. Battelle Columbus Laboratories	Routine	0.00	0.00	0.00	901.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	901.38
	Cleanup	0.00	0.00	0.00	600.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	600.91
	Total	0.00	0.00	0.00	1502.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1502.29
12. West Valley Demonstration Project	Routine	0.00	0.00	0.00	1404.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1404.86
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	1404.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1404.86
13. Formerly Utilized Sites Remedial Action Program	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	1247.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1247.00
	Total	0.00	0.00	0.00	1247.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1247.00
14. Portsmouth Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	1230.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1230.19
	Total	0.00	0.00	0.00	1230.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1230.19
15. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	7.39	274.82	0.00	0.00	0.00	201.86	0.00	0.00	0.00	484.07
	Cleanup	0.00	0.00	0.00	340.79	95.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	435.98
	Total	0.00	0.00	0.00	348.18	370.01	0.00	0.00	0.00	201.86	0.00	0.00	0.00	920.05
16. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	583.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	583.86
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	583.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	583.86
17. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	465.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	465.64
	Cleanup	0.00	0.00	0.00	94.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.39
	Total	0.00	0.00	0.00	560.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	560.03
18. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	14.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.37
	Cleanup	0.00	0.00	0.00	0.00	516.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	516.07
	Total	0.00	0.00	0.00	0.00	530.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	530.44

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Radioactive Waste (High-Level, Transuranic, Low-Level) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	441.80	0.00	0.00	0.00	441.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	441.80	0.00	0.00	0.00	441.80
20. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	229.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	229.21
	Cleanup	0.00	0.00	0.00	0.00	54.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.36
	Total	0.00	0.00	0.00	0.00	283.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	283.57
21. Pantex Plant	Routine	0.00	264.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	264.80
	Cleanup	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	Total	0.00	264.80	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	265.00
22. Lawrence Livermore National Laboratory	Routine	0.00	124.68	0.00	12.16	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	139.42
	Cleanup	0.00	2.85	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91
	Total	0.00	127.53	0.00	12.17	2.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	142.33
23. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	118.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	118.90
	Total	0.00	0.00	0.00	118.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	118.90
24. Nevada Test Site	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	87.96	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.87
	Total	0.00	87.96	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.87
25. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	81.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.30
	Cleanup	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Total	0.00	0.00	0.00	0.00	81.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.31
26. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	63.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.64
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	63.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.64
27. Sandia National Laboratories/California	Routine	0.00	6.50	0.00	0.50	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00
	Cleanup	0.00	32.30	0.00	2.48	14.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.69
	Total	0.00	38.80	0.00	2.98	17.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.69

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Radioactive Waste (High-Level, Transuranic, Low-Level) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
28. Sandia National Laboratories/New Mexico	Routine	0.50	48.53	0.00	1.11	0.00	0.00	0.00	0.00	3.50	0.51	0.00	0.00	54.15
	Cleanup	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	Total	0.53	48.53	0.00	1.11	0.00	0.00	0.00	0.00	3.50	0.51	0.00	0.00	54.18
29. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	25.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.42
	Cleanup	0.00	0.00	0.00	21.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.51
	Total	0.00	0.00	0.00	46.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.93
30. Pinellas Plant	Routine	0.00	46.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.70
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	46.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.70
31. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	21.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.15
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	21.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.15
32. Kansas City Plant	Routine	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	Cleanup	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
	Total	0.00	0.20	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
Totals for waste type	Routine	0.50	9793.67	0.00	15999.72	3653.47	0.00	0.00	0.00	2959.12	0.51	0.00	2.04	32409.03
	Cleanup	0.03	1502.43	0.00	41391.20	1734.36	0.00	0.00	0.00	1417.61	0.00	0.00	8.40	46081.03
	Total	0.53	11296.10	0.00	57390.92	5387.83	0.00	0.00	0.00	4376.73	0.51	0.00	10.44	78490.06

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Mixed Waste (Mixed Transuranic, Low-Level Mixed, Mixed TSCA Regulated Hazardous Waste) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	386.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	386.00
	Cleanup	0.00	0.00	0.00	8403.50	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	8404.56
	Total	0.00	0.00	0.00	8789.50	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	8790.56
2. Hanford Site	Routine	0.00	0.00	0.00	672.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	672.38
	Cleanup	0.00	0.00	0.00	1737.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1737.99
	Total	0.00	0.00	0.00	2410.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2410.37
3. Portsmouth Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	1875.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1875.40
	Total	0.00	0.00	0.00	1875.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1875.40
4. Savannah River Site	Routine	0.00	763.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	763.19
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	763.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	763.19
5. Paducah Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	361.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	361.68
	Total	0.00	0.00	0.00	361.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	361.68
6. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	25.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	25.02
	Cleanup	0.00	0.00	0.00	321.80	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	321.90
	Total	0.00	0.00	0.00	346.81	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	346.92
7. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	341.04	0.00	0.00	0.00	341.04
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	341.04	0.00	0.00	0.00	341.04
8. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	279.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	279.05
	Cleanup	0.00	0.00	0.00	12.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.84
	Total	0.00	0.00	0.00	291.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	291.89
9. Oak Ridge Y-12 Plant	Routine	0.00	149.93	0.00	91.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	241.49
	Cleanup	0.00	21.83	0.00	23.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.52
	Total	0.00	171.76	0.00	115.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	287.01

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Mixed Waste (Mixed Transuranic, Low-Level Mixed, Mixed TSCA Regulated Hazardous Waste) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Los Alamos National Laboratory	Routine	0.00	34.10	0.00	7.40	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.53
	Cleanup	0.00	19.03	0.00	80.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.53
	Total	0.00	53.13	0.00	87.90	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	141.06
11. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	85.04	38.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	123.43
	Cleanup	0.00	0.00	0.00	4.23	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.56
	Total	0.00	0.00	0.00	89.27	39.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	128.99
12. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.53
	Cleanup	0.00	0.00	0.00	80.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.74
	Total	0.00	0.00	0.00	82.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.27
13. Nevada Test Site	Routine	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
	Cleanup	0.00	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.10
	Total	0.00	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.60
14. Lawrence Livermore National Laboratory	Routine	0.00	5.98	0.00	11.71	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.33
	Cleanup	0.00	9.54	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.56
	Total	0.00	15.52	0.00	11.71	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.89
15. Pantex Plant	Routine	0.00	27.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.67
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	27.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.67
16. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.80
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.80
17. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.00	19.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.13
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	19.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.13
18. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	6.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.58
	Cleanup	0.00	0.00	0.00	0.00	10.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.86
	Total	0.00	0.00	0.00	0.00	17.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.44

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Mixed Waste (Mixed Transuranic, Low-Level Mixed, Mixed TSCA Regulated Hazardous Waste) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Weldon Spring Site Remedial Action Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	15.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.35
	Total	0.00	0.00	0.00	15.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.35
20. Formerly Utilized Remedial Action Program	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.10
	Total	0.00	0.00	0.00	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.10
21. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.08
	Cleanup	0.00	0.00	0.00	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.20
	Total	0.00	0.00	0.00	7.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.28
22. Battelle Columbus Laboratories	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.15
	Total	0.00	0.00	0.00	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.15
23. West Valley Demonstration Project	Routine	0.00	0.00	0.00	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.62
	Cleanup	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
	Total	0.00	0.00	0.00	5.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.08
24. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.46
	Total	0.00	0.00	0.00	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.46
25. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04
26. Sandia National Laboratories/California	Routine	0.00	1.42	0.00	0.10	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18
	Cleanup	0.00	0.97	0.00	0.07	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49
	Total	0.00	2.39	0.00	0.17	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.67
27. Sandia National Laboratories/New Mexico	Routine	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	1.93
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	1.93

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Mixed Waste (Mixed Transuranic, Low-Level Mixed, Mixed TSCA Regulated Hazardous Waste) (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
28. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
29. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
Totals for waste type	Routine	0.00	984.51	0.00	1566.48	96.88	0.00	0.00	0.00	341.26	0.00	0.00	0.00	2989.13
	Cleanup	0.00	82.47	0.00	12946.16	12.66	0.00	0.00	0.00	1.16	0.00	0.00	0.00	13042.45
	Total	0.00	1066.98	0.00	14512.64	109.54	0.00	0.00	0.00	342.42	0.00	0.00	0.00	16031.58

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Hazardous Waste (RCRA Regulated, State Regulated, TSCA Regulated) (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
1. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2016.29	0.00	2016.29
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7017.30	0.00	7017.30
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9033.59	0.00	9033.59
2. Argonne National Laboratory - East	Routine	0.00	0.00	0.00	0.00	2372.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2372.52
	Cleanup	0.00	0.00	0.00	0.00	3221.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3221.10
	Total	0.00	0.00	0.00	0.00	5593.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5593.62
3. Nevada Test Site	Routine	0.00	4440.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4440.80
	Cleanup	0.00	788.00	0.00	70.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	858.20
	Total	0.00	5228.80	0.00	70.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5299.00
4. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	2226.08	0.00	0.00	0.00	0.00	13.14	0.00	0.00	0.00	2239.22
	Cleanup	0.00	0.00	0.00	9.03	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00	10.01
	Total	0.00	0.00	0.00	2235.11	0.00	0.00	0.00	0.00	14.12	0.00	0.00	0.00	2249.23
5. Los Alamos National Laboratory	Routine	0.00	189.00	0.49	75.20	2.11	0.00	0.14	0.00	0.51	0.00	0.00	0.09	267.54
	Cleanup	0.00	242.01	0.59	597.60	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	840.42
	Total	0.00	431.01	1.08	672.80	2.33	0.00	0.14	0.00	0.51	0.00	0.00	0.09	1107.96
6. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	906.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	906.20
	Cleanup	0.00	0.00	0.00	0.00	102.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	102.30
	Total	0.00	0.00	0.00	0.00	1008.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1008.50
7. Sandia National Laboratories/New Mexico	Routine	7.65	111.05	2.69	34.23	1.85	0.00	2.10	0.00	0.00	0.87	0.00	0.00	160.44
	Cleanup	1.04	9.88	0.00	558.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	568.96
	Total	8.69	120.93	2.69	592.27	1.85	0.00	2.10	0.00	0.00	0.87	0.00	0.00	729.40
8. Hanford Site	Routine	0.00	0.00	0.00	208.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	208.79
	Cleanup	0.00	0.00	0.00	418.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	418.23
	Total	0.00	0.00	0.00	627.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	627.02
9. Western Area Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	185.42	0.00	185.42
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	396.61	0.00	396.61
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	582.03	0.00	582.03

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Hazardous Waste (RCRA Regulated, State Regulated, TSCA Regulated) (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
10. Lawrence Livermore National Laboratory	Routine	0.00	341.33	0.00	19.79	25.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	386.28
	Cleanup	0.00	150.01	0.00	20.49	13.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.74
	Total	0.00	491.34	0.00	40.28	38.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	570.02
11. Pantex Plant	Routine	0.00	307.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	307.78
	Cleanup	0.00	0.00	0.00	251.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	251.75
	Total	0.00	307.78	0.00	251.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	559.53
12. Kansas City Plant	Routine	0.00	171.26	0.00	49.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.45
	Cleanup	0.00	276.10	0.00	40.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	317.02
	Total	0.00	447.36	0.00	90.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	537.47
13. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	83.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.88
	Cleanup	0.00	0.00	0.00	0.00	413.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	413.39
	Total	0.00	0.00	0.00	0.00	497.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	497.27
14. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.80	0.00	0.00	0.00	44.80
	Cleanup	0.00	0.00	0.00	431.02	0.00	0.00	0.00	0.00	13.70	0.00	0.00	0.00	444.72
	Total	0.00	0.00	0.00	431.02	0.00	0.00	0.00	0.00	58.50	0.00	0.00	0.00	489.52
15. Paducah Gaseous Diffusion Plant	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	464.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	464.09
	Total	0.00	0.00	0.00	464.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	464.09
16. Savannah River Site	Routine	0.00	73.37	0.00	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.13
	Cleanup	0.00	54.75	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.31
	Total	0.00	128.12	0.00	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.44
17. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	105.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	105.26
	Cleanup	0.00	0.00	0.00	0.00	12.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83
	Total	0.00	0.00	0.00	0.00	118.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	118.09
18. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	8.21	7.99	71.36	0.00	0.85	0.00	0.00	0.00	0.00	1.32	89.73
	Cleanup	0.00	0.00	1.02	3.15	15.07	0.00	0.11	0.00	0.00	0.00	0.00	0.19	19.54
	Total	0.00	0.00	9.23	11.14	86.43	0.00	0.96	0.00	0.00	0.00	0.00	1.51	109.27

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Hazardous Waste (RCRA Regulated, State Regulated, TSCA Regulated) (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
19. Pinellas Plant	Routine	0.00	65.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.52
	Cleanup	0.00	0.00	0.00	38.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.90
	Total	0.00	65.52	0.00	38.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	104.42
20. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	11.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.06
	Cleanup	0.00	0.00	0.00	77.44	10.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.59
	Total	0.00	0.00	0.00	77.44	21.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	98.65
21. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	64.72	7.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.16
	Cleanup	0.00	0.00	0.00	9.95	12.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.82
	Total	0.00	0.00	0.00	74.67	20.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.98
22. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	84.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.70
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	84.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.70
23. Rocky Flats Environmental Technology Site	Routine	0.00	0.65	0.00	8.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.89
	Cleanup	0.00	0.51	0.00	48.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.28
	Total	0.00	1.16	0.00	57.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.17
24. Sandia National Laboratories/California	Routine	0.00	25.15	0.00	1.93	11.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.69
	Cleanup	0.00	12.54	0.00	0.96	5.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.29
	Total	0.00	37.69	0.00	2.89	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.98
25. Mound Plant	Routine	0.00	0.00	0.00	40.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.54
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	40.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.54
26. North Las Vegas Facility	Routine	0.00	22.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.85
	Cleanup	0.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50
	Total	0.00	30.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.35
27. Argonne National Laboratory - West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.61	0.00	0.00	0.00	17.61
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.61	0.00	0.00	0.00	17.61

Data provided by the DOE reporting sites.

1994 Site Waste Generation

Hazardous Waste (RCRA Regulated, State Regulated, TSCA Regulated) (Metric Tons)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
28. Ames Laboratory	Routine	0.00	0.00	0.00	0.00	14.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.24
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	14.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.24
29. Formerly Utilized Remedial Action Program	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	10.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.34
	Total	0.00	0.00	0.00	10.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.34
30. Pittsburgh Energy Technology Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	6.47	0.00	0.00	0.00	0.00	0.00	6.47
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	0.00	1.63
	Total	0.00	0.00	0.00	0.00	0.00	0.00	8.10	0.00	0.00	0.00	0.00	0.00	8.10
31. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	7.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.21
	Total	0.00	0.00	0.00	7.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.21
32. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.85
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.85
33. West Valley Demonstration Project	Routine	0.00	0.00	0.00	4.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.58
	Cleanup	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
	Total	0.00	0.00	0.00	4.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.77
34. Weldon Spring Site Remedial Action Project	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cleanup	0.00	0.00	0.00	3.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79
	Total	0.00	0.00	0.00	3.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79
35. Western Environmental Technology Office	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.08
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.49
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.57
Totals for waste type	Routine	7.65	5748.76	11.39	2745.04	3702.24	0.00	9.64	0.00	76.06	0.87	2201.71	1.41	14504.77
	Cleanup	1.04	1541.30	1.61	3062.63	3806.96	0.00	2.23	0.00	14.68	0.00	7413.91	0.19	15844.55
	Total	8.69	7290.06	13.00	5807.67	7509.20	0.00	11.87	0.00	90.74	0.87	9615.62	1.60	30349.32

Data provided by the DOE reporting sites.

1994 Sites Reporting Sanitary Waste Generation
(Metric Tons)

Reporting Site Name	Total Waste
1. Oak Ridge Y-12 Plant	21366.57
2. Sandia National Laboratories/New Mexico	13636.00
3. Nevada Test Site	13000.00
4. Hanford Site	9156.05
5. Los Alamos National Laboratory	8740.00
6. Kansas City Plant	8295.58
7. Savannah River Site	7007.09
8. Lawrence Livermore National Laboratory	6727.60
9. Western Area Power Administration	6417.24
10. Fernald Environmental Management Project	4698.00
11. Oak Ridge K-25 Site	3930.00
12. Rocky Flats Environmental Technology Site	2731.76
13. Lawrence Berkeley National Laboratory	2538.97
14. Mound Plant	2376.89
15. Argonne National Laboratory - East	1850.00
16. North Las Vegas Facility	1601.80
17. Weldon Spring Site Remedial Action Project	1509.54
18. West Valley Demonstration Project	1463.39
19. Oak Ridge National Laboratory	1285.93
20. Inhalation Toxicology Research Institute	1263.00
21. Argonne National Laboratory - West	1170.00
22. Portsmouth Gaseous Diffusion Plant	1090.00
23. Sandia National Laboratories/California	941.40
24. Brookhaven National Laboratory	692.80
25. Fermi National Accelerator Laboratory	643.87
26. Stanford Linear Accelerator Center	599.00
27. Pantex Plant	589.37
28. Idaho National Engineering Laboratory	388.59
29. Bonneville Power Administration	201.00
30. Princeton Plasma Physics Laboratory	194.88
31. Pinellas Plant	191.00
32. Energy Technology Engineering Center	106.00
33. Pittsburgh Energy Technology Center	98.57
34. Formerly Utilized Sites Remedial Action Program	45.40
Total Sanitary Waste	126547.29

Data provided by the DOE reporting sites.

1994 Sites Reporting Process Wastewater
(Cubic Meters)

Reporting Site	Waste Generation	Total Waste
Low-Level Radioactive Waste		3305653.00
1. Fernald Environmental Management Project	3258346.00	
2. Idaho National Engineering Laboratory	24416.00	
3. Lawrence Livermore National Laboratory	32.00	
4. Los Alamos National Laboratory	19700.00	
5. Mound Plant	2324.00	
6. Oak Ridge Y-12 Plant	835.00	
Low-Level Mixed Waste		98803.00
1. Hanford Site	2500.00	
2. Lawrence Livermore National Laboratory	5.00	
3. Oak Ridge K-25 Site	85084.00	
4. Oak Ridge National Laboratory	301.00	
5. Oak Ridge Y-12 Plant	10913.00	
Hazardous Waste - Resource Conservation and Recovery Act Regulated		869.00
1. Lawrence Livermore National Laboratory	32.00	
2. Oak Ridge National Laboratory	718.00	
3. Sandia National Laboratories/California	119.00	
Hazardous Waste - State Regulated		152905.00
1. Lawrence Berkeley National Laboratory	4865.00	
2. Lawrence Livermore National Laboratory	40.00	
3. Pinellas Plant	148000.00	
Sanitary Waste		1115527.00
1. Fernald Environmental Management Project	170222.00	
2. Hanford Site	29000.00	
3. Kansas City Plant	248512.00	
4. Oak Ridge National Laboratory	360595.00	
5. Oak Ridge Y-12 Plant	23093.00	
6. Pinellas Plant	61400.00	
7. Energy Technology Engineering Center	6373.00	
8. Stanford Linear Accelerator Center	3700.00	
9. Western Environmental Technology Office	4732.00	
GRAND TOTAL		4673757.00

Data provided by the DOE reporting sites.

Changes to Data Reported for 1993

Waste Type	Reporting Site Name	1993 Value	Revised 1993
Low-Level Radioactive	Argonne National Laboratory - East - Routine Operations (Solid)	160.00	294.00
	Idaho National Engineering Laboratory - Routine Operations (Solid)*	2496.98	608.00
	Idaho National Engineering Laboratory - Cleanup/Stabilization (Solid)*	2350.73	1660.00
	Nevada Test Site - Cleanup/Stabilization (Solid)	178.00	249.00
Low-Level Mixed	Argonne National Laboratory - East - Routine Operations (Solid)	12.00	142.00
	Idaho National Engineering Laboratory - Routine Operations (Solid)*	23.62	16.80
	Idaho National Engineering Laboratory - Cleanup/Stabilization (Solid)*	4.89	3.37
	Oak Ridge K-25 Site - Routine Operations (Liquid)	570.00	336.00
	Oak Ridge K-25 Site - Routine Operations (Solid)	193.00	168.00
	Oak Ridge K-25 Site - Cleanup/Stabilization (Liquid)	238.00	483.50
	Oak Ridge K-25 Site - Cleanup/Stabilization (Solid)	85.00	34.86
RCRA Regulated	Idaho National Engineering Laboratory - Routine Operations*	584.20	8.37
	Idaho National Engineering Laboratory - Cleanup/Stabilization*	612.08	8.37
	Nevada Test Site - Routine Operations	34.60	160.00
	Nevada Test Site - Cleanup/Stabilization	0.00	59.90
State Regulated	Argonne National Laboratory - East - Routine Operations	1214.00	3657.00
	Nevada Test Site - Routine Operations	35.00	3550.00
	Nevada Test Site - Cleanup/Stabilization	0.00	626.00
TSCA Regulated	Idaho National Engineering Laboratory - Cleanup/Stabilization*	6.92	6.93
	Nevada Test Site - Cleanup/Stabilization	0.00	0.07
Mixed TSCA Regulated	Idaho National Engineering Laboratory - Cleanup/Stabilization*	1.96	0.83
	Nevada Test Site - Routine Operations	0.00	0.01
	Nevada Test Site - Cleanup/Stabilization	0.00	6.43
Sanitary	Argonne National Laboratory - East - Routine Operations	1255.00	1306.00
	Fernald Environmental Management Project - Routine Operations	3314.00	1988.40
	Fernald Environmental Management Project - Cleanup/Stabilization	0.00	1325.60
	Hanford Site - Routine Operations	7660.00	7123.80
	Hanford Site - Cleanup/Stabilization	0.00	536.20
	Inhalation Toxicology Research Institute - Routine Operations	572.00	522.20
	Inhalation Toxicology Research Institute - Cleanup/Stabilization	0.00	49.80
	Mound Plant - Routine Operations	2363.00	1157.87
	Mound Plant - Cleanup/Stabilization	0.00	1205.13
	Nevada Test Site - Routine Operations	7172.00	10465.00
	Oak Ridge National Laboratory - Routine Operations	1290.00	1225.50
	Oak Ridge National Laboratory - Cleanup/Stabilization	0.00	64.50
	Oak Ridge Y-12 Plant - Routine Operations	17924.00	17386.28
	Oak Ridge Y-12 Plant - Cleanup/Stabilization	0.00	537.72
	Portsmouth Gaseous Diffusion Plant - Routine Operations	2718.00	2038.50
	Portsmouth Gaseous Diffusion Plant - Cleanup/Stabilization	0.00	679.50
	Sandia National Laboratories/California - Routine Operations	4245.62	7958.00
	Sandia National Laboratories/California - Cleanup/Stabilization	0.00	11906.00
	Weldon Spring Site Remedial Action Project - Routine Operations	1664.00	1600.00
	Weldon Spring Site Remedial Action Project - Cleanup/Stabilization	0.00	2620.00

*Waste generation amounts reported by the Idaho National Engineering Laboratory include amounts reported by the Idaho Chemical Processing Plant.

Data provided by the DOE reporting sites.

Appendix C

TOXICS RELEASE INVENTORY REPORTING FOR DOE FACILITIES

On August 3, 1993, President Clinton signed Executive Order 12856, requiring facilities owned and operated by Federal agencies to report Toxics Release Inventory (TRI) data, beginning with the 1994 reporting year. This Order ensures public access to information on transfers and releases of toxic chemicals and their impact on the implementation of pollution prevention activities across the DOE complex.

Executive Order 12856 extends all of the provisions of the Emergency Planning and Community Right-to-Know Act (EPCRA) to Federal facilities. All Federal Facilities must file a Toxics Release Inventory report with the Environmental Protection Agency and the States (EPCRA §313), and must submit reports on hazardous chemicals to local authorities (EPCRA §311-312). This Order also directs Federal agencies to establish a voluntary goal to reduce total releases and offsite transfers of toxic chemicals and pollutants by 50 percent using 1994 as the baseline year.

Although 1994 is the baseline year for reporting Toxics Release Inventory data by the Federal government, the Environmental Protection Agency has received data reports from some Federally owned sites since 1987. Toxics Release Inventory data reported by DOE sites in 1993 and 1994 is shown in Table C.1.

On July 1, 1993, management of the Paducah Gaseous Diffusion Plant and the Portsmouth Gaseous Diffusion Plant was transferred to the United States Enrichment Corporation (USEC). USEC is a corporation established by the Energy Policy Act of 1992 to transfer uranium enrichment responsibilities from DOE to allow operation as a for-profit business. USEC is responsible for reporting Toxics Release Inventory data for the Paducah Gaseous Diffusion Plant and the Portsmouth Gaseous Diffusion Plant, and DOE continues to be responsible for environmental restoration and related waste management activities at the plants. Table C.2 presents DOE facilities with the largest total toxics releases in 1994. ■

*Table C.1 Total Releases for U.S. Department of Energy Facilities Reporting to TRI, 1993 and 1994**

Facility Name	*City*	*State*	*1993 Forms (Number)*	*1993 Total Releases (Pounds)*	*1994 Forms (Number)*	*1994 Total Releases (Pounds)*
Argonne National Laboratory - East	Argonne	IL	6	1,500	6	529
Brookhaven National Laboratory	Upton	NY	3	2,905	2	1,405
Fermi National Accelerator Laboratory	Batavia	IL	5	1,800	5	250
Fernald Environmental Management Project	Fernald	OH	1	1,910	1	1,710
Hanford Site	Richland	WA	1	14	0	0
Idaho National Engineering Laboratory	Idaho Falls	ID	2	68,310	6	15,089
Kansas City Plant	Kansas City	MO	1	1,270	0	0
Lawrence Livermore National Laboratory	Livermore	CA	0	0	1	2,700
Los Alamos National Laboratory	Los Alamos	NM	2	4,865	1	1,920
Mound Plant	Miamisburg	OH	1	250	0	0
Nevada Test Site	Mercury	NV	1	0	0	0
Oak Ridge K-25 Site	Oak Ridge	TN	4	5,303	4	88
Oak Ridge National Laboratory	Oak Ridge	TN	4	7,358	4	612
Oak Ridge Y-12 Plant	Oak Ridge	TN	4	73,750	4	72,350
Pinellas Plant	Largo	FL	4	22,750	3	6,850
Portsmouth Gaseous Diffusion Plant	Piketon	OH	5	168,914	3	1,841
Rocky Flats Environmental Technology Site	Golden	CO	3	4,122	3	2,431
Sandia National Laboratories/NM	Albuquerque	NM	1	250	3	1,250
Savannah River Site	Aiken	SC	8	67,096	6	55,569
Stanford Linear Accelerator Center	Stanford	CA	1	8,300	1	13,300
Weldon Spring Site Remedial Action Project	St. Charles	MO	1	255	2	11
TOTALS			*58*	*440,922*	*55*	*177,905*

** Does not include delisted chemicals, chemicals added in 1994, ammonia, ammonium sulfate (solution), or sulfuric acid.*

Data reported by the 1994 Toxics Release Inventory Public Data Release, June 1996 (EPA 745-R-96-002).

Table C.2 DOE Facilities with the Largest Total TRI Releases, 1994

Facility Name	*City*	*State*	*SIC Codes*	*Forms (Number)*	*Total Air Emissions (Pounds)*	*Surface Water Discharges (Pounds)*	*Underground Injection (Pounds)*	*Releases to Land (Pounds)*	*Total Releases (Pounds)*
Idaho National Engineering Laboratory	Idaho Falls	ID	87 28 37	7	15,991	0	0	220,600	236,591
USEC Paducah Gaseous Diffusion Plant	Paducah	KY	28	3	364,760	0	0	0	364,760
USEC Portsmouth Gaseous Diffusion Plant	Piketon	OH	28	7	385,102	783	0	61	385,946
TOTALS				*29*	*901,400*	*1,008*	*0*	*232,313*	*1,134,721*

Data reported by the 1994 Toxics Release Inventory Public Data Release, June 1996 (EPA 745-R-96-002).

Appendix D

GLOSSARY OF TERMS

BASELINE ENVIRONMENTAL MANAGEMENT REPORT (BEMR) - Congressionally mandated report prepared by the Secretary of Energy to estimate the cost and schedule of cleaning up the Nation's nuclear weapons complex.

BYPRODUCT - Under the Resource Conservation and Recovery Act, a byproduct is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use that is ordinarily used in the form in which it is produced by the process.

11e(2) BYPRODUCT MATERIAL - As defined by Section 11e(2) of the Atomic Energy Act of 1954, as amended, and Department of Energy Order 5820.2A, 11e(2) byproduct material is "the tailings or waste produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." Ore bodies depleted by uranium solution extraction operations and which remain underground do not constitute byproduct material.

CLEANUP/STABILIZATION WASTE - Cleanup/stabilization encompasses a complex range of activities including environmental restoration of contaminated media (soil, groundwater, surface water, sediments, etc.); stabilization of nuclear and nonnuclear (chemical) materials; and deactivation and decommissioning (including decontamination) of facilities. Cleanup/stabilization waste consists of one-time operations waste produced by environmental restoration program activities, including primary and secondary wastes associated with retrieval and remediation operations; "legacy wastes;" and wastes from decontamination and decommissioning/transition operations. It also includes all Toxic Substances Control Act regulated wastes, such as polychlorinated biphenyl-contaminated fluids and/or equipment. Note that cleanup/stabilization activities that generate wastes do not necessarily occur at a single point in time, but may have a duration of several years during which time wastes are produced. By definition, these activities are not considered to be routine (periodic and/or on-going), because *the waste is a direct result of past operations and activities*, rather than a current process. Newly generated wastes that are produced during these "one-time operations" are considered to be a secondary wastestream, and are separately accounted for whenever possible. This secondary (newly generated) waste usually results from common activities such as handling, sampling, treatment, repackaging, shipping, etc.

COGNIZANT SECRETARIAL OFFICE (CSO) - An office within DOE, headed by an Assistant Secretary or Organizational Director, that reports and has management responsibility over designated multi-program Operations Offices and National Laboratories. These offices include Defense Programs (DP), Energy Efficiency and Renewable Energy (EE), Environmental Management (EM), Energy Research (ER), Office of Scientific and Technical Information (ET), Office of Fossil Energy (FE), Human Resources and Administration (HR), Nuclear Energy (NE), and Office of Civilian Radioactive Waste Management (RW).

DECOMMISSIONING - Actions taken to reduce the potential health and safety impacts of contaminated DOE facilities, including activities to remove a facility from operation, followed by decontamination, entombment, dismantlement, or conversion to another use.

DIRECT POLLUTION PREVENTION FUNDING - Funding provided exclusively for pollution prevention activities.

DISPOSAL - Emplacement of waste in a manner designated to isolate it from the biosphere with no intent of retrieval in the foreseeable future, and that requires deliberate action to regain access to the waste.

DOE AREA OFFICES - The first line DOE field element that carries the organizational responsibility for (1) managing and executing assigned programs, (2) directing contractors who conduct programs, and (3) assuring that environment, safety, and health protection are integral parts of each program.

DOE OPERATIONS OFFICES - In the absence of a DOE Area Office, the first line DOE field element that carries the organizational responsibility for (1) managing and executing assigned programs, (2) directing contractors who conduct programs, and (3) assuring that environment, safety, and health protection are integral parts of each program.

ENVIRONMENTAL RESTORATION - Cleanup and restoration of sites contaminated by radioactive and/or hazardous substances during past production, accidental releases, or disposal activities.

FACILITY - Any building, structure, system, process, equipment, or activity that fulfills a specific purpose on a site.

HAZARDOUS WASTE - A solid waste, or combination of wastes, that because of its quantity, concentration, or physical, chemical, or infectious characteristics, may (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness, or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Hazardous waste is further defined in this report as:

Resource Conservation and Recovery Act (RCRA) regulated - solid waste, not specifically excluded from regulation under 40 CFR 261.4, or delisted by petition, that is either a listed hazardous waste (40 CFR 261.30 - 261.33) or exhibits the characteristics of a hazardous waste (40 CFR 261.20 - 261.24).

State regulated - any other hazardous waste not specifically regulated under RCRA, which may be regulated by State or local authorities, such as used oil.

Toxic Substances Control Act (TSCA) regulated - Individual chemical wastes (both liquid and solid), such as polychlorinated biphenyls, which are regulated by the Toxic Substances Control Act.

HIGH-LEVEL RADIOACTIVE WASTE - Irradiated reactor fuel, liquid wastes resulting from operation of the first cycle solvent extraction system or equivalent, and the concentrated wastes from subsequent extraction cycles or equivalent in a facility for reprocessing irradiated reactor fuel, and solids into which such liquid wastes have been converted. (10 CFR 60.2)

INCINERATION - A treatment technology which uses combustion to destroy organic constituents and reduce the volume of wastes.

INDIRECT POLLUTION PREVENTION FUNDING - Funding for pollution prevention that is extracted from or is included within a multi-purposed line item.

INVENTORY (STORED) WASTE - A waste that, following generation (and usually some treatment), is (temporarily) retained and monitored in a retrievable manner pending disposal. Inventory waste does *not* include spent nuclear fuels, mill tailings, or miscellaneous radioactive materials.

LEAD CSO - CSO assigned line management responsibility and accountability for Headquarters and Operations Office activities (e.g., landlord functions) to which one or more multi-program Operations Offices report directly. For the purpose of this Report, site Lead CSOs are responsible for gathering and reporting waste data.

LEGACY WASTE - The backlog of stored waste remaining from the development and production of U.S. nuclear weapons, about which a permanent disposal determination remains to be made; i.e., waste that is currently in storage, retrievable storage on bermed pads, or buried in trenches.

LOW-LEVEL RADIOACTIVE WASTE - Radioactive waste not classified as high-level waste, transuranic waste, spent nuclear fuel, or byproduct material (specified as uranium or thorium tailings and waste in accordance with DOE Order 5820.2A).

MARGIN-OF-ERROR ESTIMATE - An estimate of the margin-of-error for waste generation amounts reported by each reporting site.

MIXED WASTE - Waste that contains both radioactive and hazardous components, as defined by the Atomic Energy Act, Toxic Substances Control Act, or Resource Conservation and Recovery Act. Mixed waste is further defined here as transuranic mixed, low-level mixed, and Toxic Substances Control Act regulated hazardous mixed.

"NON-DOE INVENTORY WASTE" - Includes "work-for-others" waste, as well as commercial and medical wastes that were shipped to DOE sites for storage or treatment, and remained onsite as of December 31, 1992.

NUMBER OF DOE EMPLOYEES - The total number of DOE employees that are either physically located onsite to support and manage the site operations funded by DOE, or are employed offsite at either the local Field or Area Office. This number for each reporting site does not include DOE employees located at the operations office, as these numbers were collected separately.

OPERATIONAL STATUS - A brief narrative description of the status of each CSO's operations in 1993. Because of the mission changes occurring throughout the DOE complex, changes in waste generation (both waste type and quantity) as they relate to operational status changes at each reporting site were documented whenever possible.

OVERPACK - A waste container used to hold waste packages, which provides protection or convenience in handling, or to consolidate two or more packages. The container does not include a freight container. Note the overpack could also become a waste package.

POLLUTION PREVENTION - Preventing or reducing the generation of pollutants, contaminants, hazardous substances, or wastes at the source, or reducing the amount for treatment, storage, and disposal through recycling.

Waste minimization/pollution prevention can be applied to all pollution-generating activities at DOE, including:

- Manufacturing and production operations
- Weapons dismantlement
- Maintenance
- General operations
- Transportation
- Research, development, and demonstration
- Laboratory research
- Decommissioning activities
- Legacy waste and contaminated site cleanup

Waste minimization/pollution prevention can be achieved through:

- Source reduction – equipment or technology selection or modification, process, or procedure modification; reformulation or redesign of products; substitution of raw materials; and improvements in housekeeping, maintenance, training, or inventory control. Increased efficiency in the use of raw materials, energy, water, or other resources, including affirmative procurement. Protection of natural resources by conservation.

- Recycling – the use, reuse, or reclamation of waste materials.

Environmental restoration activities are directed toward removal and treatment of legacy waste and pollutants already generated by past production and manufacturing operations. In the process of conducting restoration activities, additional waste and pollutants may be generated (e.g., decommissioning of a plant and equipment, and dismantlement of weapons systems). Waste minimization/pollution prevention techniques should be practiced during these activities to prevent or reduce the generation of new wastes and pollutants.

POLLUTION PREVENTION OPPORTUNITY ASSESSMENT (PPOA) - Evaluation and appraisal of a process, activity, or operation as a way to identify potential pollution prevention opportunities. Formerly called Process Waste Assessments.

POWER ADMINISTRATION - Federal Power Marketing Administrations reporting to the Assistant Secretary for Conservation and Renewable Energy, including the Alaska Power Administration, Bonneville Power Administration, Southeastern Power Administration, Southwestern Power Administration, and the Western Area Power Administration.

PRIMARY WASTE - See Cleanup/Stabilization Waste definition.

PROCESS - A unique industrial, commercial, or manufacturing system or operation that produces products and may generate waste byproducts.

PROCESS WASTEWATER - Any water produced during manufacturing or processing operations that comes into direct contact with or results from the production of or use of any raw material, intermediate product, finished product, byproduct, or waste product. This determination is independent of the level and/or nature of the contaminants. Additionally, process wastewaters are liquid wastes that are directly piped to a permitted (onsite) waste treatment facility, where treatment may consist of neutralization, evaporation, or placement in a settling or percolation pond, etc. This term does not include the liquid discharges to publicly-owned treatment works, which are governed by Environmental Protection Agency- or State-issued National Pollutant Discharge Elimination System permits or local pretreatment standards.

Examples of process wastewater include cooling water from air compressor systems, air conditioners, and heating systems; boiler or cooling tower blowdown; ion-exchange regeneration wastewater; and laboratory operations wastewater. It does *not* include nonprocess wastewaters such as stormwater, well purge water, irrigation drainage, fire-fighting and hydrant flushings, lawn watering, pavement wash waters, vehicle wash water, etc.

PROGRAM - See Cognizant Secretarial Office definition.

PROJECT TERMINATION/DISASSEMBLY COST - Costs associated with disassembly and removal of equipment/structures provided as part of a proposed project, decontamination, release surveys, and final dispositioning of materials.

RCRA REGULATED WASTE - See Hazardous Waste definition.

RECYCLING - A material is "recycled" if it is used, reused, or reclaimed.

RELEASE SITE - A location at which a hazardous, radioactive, or mixed waste discharge has occurred or is suspected to have occurred. It is usually associated with an area where hazardous, radioactive, or mixed waste or waste-contaminated substances have been used, treated, stored, and/or disposed.

REPORTING SITE - A specific DOE site that meets the minimum threshold reporting requirement for providing data for the *Annual Report of Waste Generation and Pollution Prevention Progress 1994.*

REPROCESSING - The dissolution of spent reactor fuel and separation of uranium, transuranic elements, and fission products.

RETURN-ON-INVESTMENT (ROI) POLLUTION PREVENTION PROJECTS - Specific pollution prevention projects that rapidly pay for themselves (preferably in three years or fewer) through reducing future pollutant generation.

ROUTINE OPERATIONS WASTE - Normal operations waste produced by any type of production, analytical, and/or research and development laboratory operations; treatment, storage, or disposal operations; "work-for-others;" or any other periodic and recurring work that is considered ongoing. The term "normal operations" refers to the type of ongoing process (e.g., production) *not* to the specific activity that produced the waste. Periodic laboratory or facility clean-outs and spill cleanups which occur as a result of these processes are also considered normal operations.

SANITARY WASTE - Wastes, such as garbage, that are generated by normal housekeeping activities and are not hazardous or radioactive.

SECONDARY WASTE - See Cleanup/ Stabilization Waste definition.

SITE - A geographic entity comprising land, installations, and/or facilities required to perform program objectives for which DOE has (or shares) responsibility for environmental restoration or waste management activities. A site generally has all of the required management functions within its organizational structure. Examples of sites include the Hanford Site, Savannah River Site, Brookhaven National Laboratory, Kansas City Plant, Pantex Plant, and the Oak Ridge Y-12 Plant.

SITE-WIDE POLLUTION PREVENTION PROGRAM ACCOMPLISHMENTS - Waste minimization accomplishments that affect the entire site, rather than just a single process or CSO-specific activity. Site-wide accomplishments include efforts directed at all employees at the reporting site, such as a narrative description of recycling programs (paper, aluminum cans, etc.); improvements to training programs; incentive programs; employee awareness and/or outreach programs; or any other activity that is designed to reach the entire site population.

SOLID WASTE - Any garbage, refuse, sludge, or other discarded material, including solid, liquid, semi-solid, or contained gaseous material from industrial and commercial operations. Does not include domestic sewage, irrigation return flow, or Clean Water Act permitted industrial discharges; or source, special nuclear, or byproduct material defined by the Atomic Energy Act.

SOLVENT SUBSTITUTION - Replacement of a hazardous solvent with a less hazardous or non-toxic material for the purpose of eliminating hazardous and/or radioactive mixed wastes.

SOURCE REDUCTION - Practices which reduce the amount of any hazardous substance, pollutant, or contaminant entering any wastestream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and any practice that reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

SPENT NUCLEAR FUEL - Fuel that has been withdrawn from a nuclear reactor following irradiation, but that has not been reprocessed to remove its constituent elements.

STABILIZATION - Actions taken to further confine or reduce the hazards associated with contaminated sites, areas, buildings, or equipment.

STATE REGULATED WASTE - See Hazardous Waste definition.

STORAGE - Holding hazardous, radioactive, or sanitary waste for a temporary period, at the end of which the waste is treated, disposed, or stored elsewhere.

SURPLUS FACILITY - Any facility, site, or installed equipment that has no identified programmatic use and may or may not be radioactively contaminated to levels that require controlled access.

TRANSITION - The process of planning and completing a transfer of surplus facilities from one CSO (program) to another. Transition involves safely deactivating unneeded facilities and overseeing their smooth transfer, cleanup, and/or preparation for further use.

TRANSURANIC WASTE - Waste that is contaminated with alpha-emitting radionuclides with an atomic number greater than 92 (heavier than uranium), half-lives greater than 20 years, and concentrations greater than 100 nanocuries per gram of waste.

TREATMENT - Any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous, radioactive, or sanitary waste, so as to neutralize, recover energy or material resources from the waste; to render the waste nonhazardous, safer to transport, store, or dispose; to render the waste amenable for recovery or storage; or to reduce its volume.

TSCA REGULATED WASTE - See Hazardous Waste definition.

WASTE - Damaged, defective, unwanted, or superfluous material. Anything unused, unproductive, or not properly used; anything left over (such as excess material or byproducts), to be recycled, treated, stored, or disposed.

WASTE CONTAINER - A receptacle for waste, including any liner or shielding material, that can be used for retrievable or long-term storage or disposal.

WASTE GENERATION - Any waste produced during the current calendar year. Does not include waste produced in previous years that is being re-packaged, treated, or disposed in the current calendar year. Does include secondary waste generated by the treatment, storage, or disposal of previously generated wastes (e.g., clothing, gloves, waste from maintenance operations, etc.).

WASTE GENERATOR - An individual, group, or organization at a facility which produces waste.

WASTE MINIMIZATION - An action that economically avoids or reduces the generation of waste by source reduction, reducing the toxicity of hazardous waste, improving energy usage, or recycling. This action will be consistent with the general goal of minimizing present and future threats to human health, safety, and the environment.

WASTESTREAM - A waste or group of wastes with similar physical form, radiological properties, Environmental Protection Agency waste codes, or associated Land Disposal Restriction treatment standards. The waste or group of wastes may be the result of one or more processes or operations.

WASTE TYPE - Definition of waste based on physical properties or characteristics (e.g., high-level, transuranic, low-level radioactive, low-level mixed, hazardous, or sanitary). ■

Appendix E

RESOURCE CONSERVATION AND RECOVERY ACT AGENCY SUMMARY REPORT FOR FISCAL YEAR 1995

Date Due:	**February 1, 1996**
Date Prepared:	**January 2, 1996**
Agency or Department:	**U.S. Department of Energy**
Agency Contact:	**Richard J. Guimond, Assistant Surgeon General, USPHS, Principal Deputy Assistant Secretary for Environmental Management, Environmental Executive**
Staff Contact:	**Susan Weber, Office of Pollution Prevention, EM-77**

I. EPA Guideline Items

A. Fly Ash.

a. Total dollar amount of concrete and cement purchased by your agency in FY 1995.

$13,606,735

b. Total dollar amount of concrete and cement containing fly ash purchased by your agency in FY 1995.

$7,419,534

B. Paper and Paper Products. GSA will provide data for agencies' purchases of paper products made through their retail and wholesale stock program. However, please provide amounts for agency purchases from any other sources.

a. Total dollar amount of paper and paper products purchased by your agency from sources other than GSA retail and wholesale stock programs in FY 1995.

$19,392,811

b. Total dollar amount of paper and paper products containing recycled material purchased by your agency from sources other than GSA retail and wholesale stock programs in FY 1995.

$10,093,814

C. Lubricating Oils.

a. Total dollar amount of lubricating oils purchased by your agency in FY 1995.

$2,015,020

b. Total dollar amount of lubricating oils purchased by your agency from non-Defense Logistics Agency (DLA) sources in FY 1995.

DOE distributed an electronic version of the RCRA Agency Summary Report to field facilities in September 1995 prior to receiving the revised report format from the Office of Federal Procurement Policy. This question [I(C)(b)] was not included in the version sent to the field; therefore, the information is not available.

c. Total dollar amount of lubricating oils containing re-refined oil purchased by your agency in FY 1995.

$39,713

D. Retread Tires.

a. Total dollar amount of tires (excluding airplane tires) purchased by your agency in FY 1995.

$1,930,481

b. Total dollar amount of retread tires (excluding airplane tires) purchased by your agency in FY 1995.

$112,888

E. Building Insulation Products.

a. Total dollar amount of building insulation products purchased by your agency in FY 1995.

$2,258,869

b. Total dollar amount of building insulation products containing recycled materials purchased by your agency in FY 1995.

$350,163

II. Specifications. RCRA, Section 6002(d) and Executive Order 12873 require that Federal activities having responsibility for preparing specifications, review them to eliminate unnecessary requirements for the use of virgin materials and prohibitions against using recovered materials and add preferences for recovered materials.

a. Does your agency have responsibility or control over a particular Federal Supply class or group of specifications or standards?

NO

b. How many product specifications, standards, Commercial Item Descriptions (CIDs), product descriptions or other similar documents does your agency control?

64,214

c. How many such documents were reviewed in FY 1995 to:

(1) remove any unnecessary requirements for virgin material only?

8,999

(2) remove language prohibiting the use of recovered materials?

8,916

(3) add preference language for recovered materials?

3,551

d. How many requirements for virgin materials only were deleted from such documents in FY 1995?

11

e. How many references of language prohibiting use of recovered materials were removed from such documents in FY 1995?

4

f. How many preferences for recovered materials were added to such documents in FY 1995?

131

g. How many documents are scheduled for review in FY 1996?

3,359

III. General Requirements.

A. Are you updating your agency Affirmative Procurement Program that is due by May 1996 to the FEE?

YES

B. When is your estimated completion date?

August 1996

C. How have you resolved problems encountered by your agency in implementing RCRA Section 6002 and EO 12873?

Awareness: **The Office of Pollution Prevention is working closely with other influential DOE organizations (e.g., procurement and fleet management) to further the understanding and acceptance of affirmative procurement requirements throughout DOE.**

DOE continues to emphasize affirmative procurement through newsletter articles, on DOE Internet World Wide Web home pages, and at relevant meetings and conferences.

Contract Language: **The vast majority of products are purchased by DOE's Management and Operating (M&O) Contractors. DOE's contractors are only required to do what is specified in their contracts. While most contractors have voluntarily implemented affirmative procurement programs, a few have cited the lack of contractual provisions as the reason for not doing so.**

The DOE Office of Procurement and Assistance Management issued an amendment to the Department of Energy Acquisition Regulation (DEAR) in September 1995 regarding the use of environmentally preferable products and services. This DEAR amendment includes an affirmative procurement contract clause for M&O contracts.

Government Credit Card: **Another significant barrier that emerged in FY 1995 was the increased use of government credit cards and the inability to capture affirmative procurement-related information from these transactions. DOE Headquarters reports the following increases in the use of purchase cards between August 1994 and August 1995:**

- **141 percent increase in the number of cardholders from 1,137 to 2,743;**
- **137 percent increase in the number of monthly purchases from 4,412 to 10,462; and**
- **187 percent increase in the monthly value of purchases from $1,959,991 to $5,619,228.**

Unless Government-wide affirmative procurement tracking measures are implemented for these purchases, the ability to fully account for recycled purchases will decrease as credit card transactions increase.

Incentives: **Recognition of affirmative procurement successes continues through the annual DOE Pollution Prevention awards program which completed its third year in 1995.**

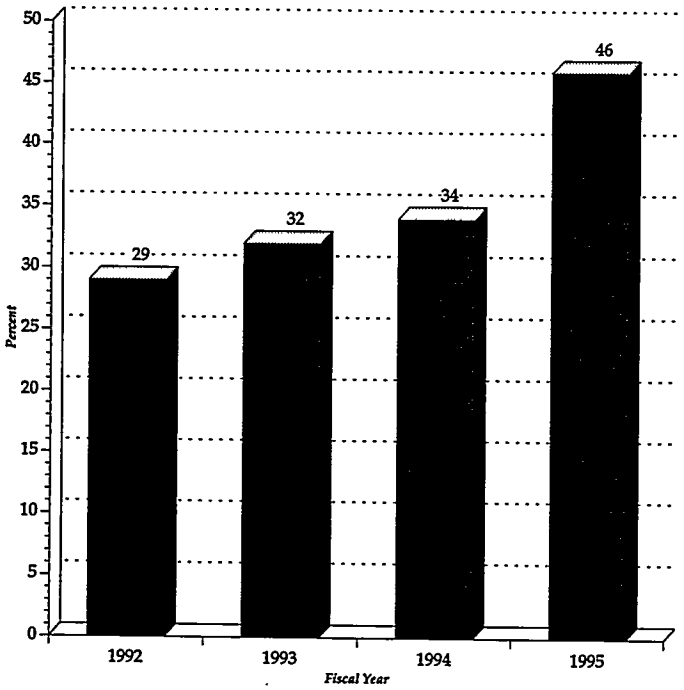
Tracking: **Several DOE facilities reported the inability to track individual components of a construction project (e.g., purchases of building insulation or cement and concrete containing fly ash) as a barrier. DOE has made considerable progress in automating the tracking and reporting of recycled purchases; however, the inability to account for purchases that are part of a construction project remains.**

D. Describe any best practices or lessons learned by your agency in purchasing the five EPA recycled guideline items.

As shown in Figure E.1, the percentage of recycled EPA-designated items purchased by DOE has been steadily increasing since FY 1992. Forty-six percent of the FY 1995 purchases contained recovered content, compared to 34 percent in FY 1994, 32 percent in FY 1993, and 29 percent in FY 1992.

Despite this progress, facilities continue to cite lack of availability and performance problems (or perceived performance problems) as significant barriers to purchasing EPA-designated items.

Figure E.1 U.S. Department of Energy Percentage of Recycled EPA-Designated Item Purchases (FY 1992 – FY 1995)



Also, the higher cost of some items (e.g., paper products and oil) was frequently identified as a significant factor hindering the purchase of recycled products, especially in light of significant budget cuts throughout the Department. Despite these barriers, DOE facilities reported the following best practices for advancing affirmative procurement:

Nevada Operations Office: Requisitioners must justify (on the requisition submitted) why the purchase of recycled products is not allowed.

Savannah River Site/Wackenhut Environmental Services, Inc.: The Environmental Protection and Procurement departments review requisitions to see if items being requested are of recycled content or can be substituted with an item containing reclaimed materials.

Schenectady Naval Reactors/KAPL, Inc.: Purchase in large volumes to get more cost-competitive quotes (i.e., identify annual usage of a product and procure on this basis versus more frequent, small quantity buys).

Pinellas Plant: Use pilot projects to introduce users to the product prior to total, facility-wide implementation. Use closed-loop systems to keep costs down (i.e., purchase the recycled product from the same vendor that recycles the material).

Oak Ridge Operations Office/Martin Marietta Energy Systems, Inc.: Procurement contracts are reviewed at the time of renewal for the opportunity to incorporate recycled-content materials. The facility's affirmative procurement team works diligently to identify recycled-content alternatives.

Several DOE facilities stressed the importance of getting acceptance from users (particularly when there is the "perception" of inferior quality) and letting vendors know of interest in purchasing recycled-content products.

E. Describe any best practices or lessons learned by your agency in purchasing recycled items, other than the guideline items.

Recycled toner cartridges were the most frequently reported recycled purchase. Cost saving is the major factor contributing to their frequency of use. ■

Appendix F

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