Preface

Department of Energy
Washington, DC 20585

The fourth edition of this Report updates the waste generation and pollution prevention activities by Department of Energy sites and provides a status of our progress in meeting the waste reduction goals set by the Secretary of Energy in May 1996. The Secretarial goals require that by the end of 1999, we reduce or avoid waste generation to achieve a 50 percent reduction in low-level radioactive, low-level mixed, and hazardous wastes, compared to 1993 levels. Additional goals exist for sanitary wastes, recycling, and affirmative procurement. The Department is well on its way towards meeting its Secretarial goals for wastes generated in routine, everyday operations.

With cleanup activities fully underway, significant pollution prevention opportunities now exist within the Environmental Management (EM) organization. Secondary waste reduction resulting from cleanup/stabilization activities can be significant, allowing the cost savings to be used to accelerate the cleanup effort. The EM organization is also the Department's largest generator of new wastes from routine operations. I expect EM sites to be fully committed to minimizing newly generated wastes and to incorporate this principle into their ten year plans.

Again this year I applaud the work that Federal and contractor employees have achieved on pollution prevention at DOE sites. Thank you for your commitment to this important program.

Alvin L. Alm
Assistant Secretary for Environmental Management

At A Glance

This fourth Annual Report presents and analyzes 1995 DOE complex-wide waste generation and pollution prevention activities at 40 reporting sites in 25 States, and trends DOE waste generation from 1991 through 1995. DOE has established a 50 percent reduction goal (relative to the 1993 baseline) for routine operations radioactive and hazardous waste generation, due by December 31, 1999. Routine operations waste generation decreased 37 percent from 1994 to 1995, and 43 percent overall from 1993 to 1995.

DOE Complex-Wide Waste Generation[1]

- In 1995, a total of 351,883 cubic meters of waste was generated:
  - 117,237 cubic meters of radioactive waste (33 percent)
  - 7,431 cubic meters of mixed waste (two percent)
  - 31,284 metric tons of hazardous waste (nine percent)
  - 195,931 metric tons of sanitary waste (56 percent).

- Excluding sanitary waste and wastewater:
  - Routine operations waste decreased 37 percent and cleanup/stabilization waste increased 69 percent from 1994 to 1995.
  - Cleanup/stabilization waste volume (124,519 cubic meters) was approximately four times greater than routine operations waste volume (31,433 cubic meters).
  - High-level waste and transuranic waste were generated primarily by routine operations.
  - Low-level radioactive, low-level mixed, and hazardous waste were generated primarily by cleanup/stabilization activities.
  - Low-level radioactive waste was the largest waste type generated, accounting for 68 percent of the routine operations waste generated, and approximately 75 percent of the cleanup/stabilization waste generated.
  - Cleanup/stabilization wastes are a retrieval of previously generated wastes and do not necessarily represent an avoidable waste on the part of sites. As new in situ remediation and other waste prevention technologies become increasingly applied to the programs, proportionately less waste will be processed.

Waste Generation by Program

- Approximately 69 percent of the waste generated by the DOE complex was the result of Environmental Management program activities, and approximately 20 percent was the result of Defense Programs activities.

- The Environmental Management program generated the largest amounts of all types of waste for both routine operations and cleanup/stabilization activities.

Waste Generation by Site

- The Savannah River Site in South Carolina generated the largest high-level waste volume (2,321 cubic meters) and the largest routine transuranic waste volume (141 cubic meters).

- The Fernald Environmental Management Project in Ohio generated the largest low-level radioactive waste volume (72,319 cubic meters).

- The Rocky Flats Environmental Technology Site in Colorado generated the largest low-level mixed waste volume (2,582 cubic meters).

- The Argonne National Laboratory–East in Illinois generated the largest hazardous waste amount (12,166 metric tons).

- The Idaho National Engineering Laboratory in Idaho generated the largest sanitary waste amount (50,647 metric tons).

[1] *Reported low-level radioactive and low-level mixed waste generation data 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 1995 was the Weldon Spring Site Remedial Action Project.*

At A Glance

Pollution Prevention/Recycling

- 76,152 metric tons of materials were recycled in 1995. Approximately 56 percent of all recycling within the DOE complex was done in the States of Oregon (22 percent), Tennessee (21 percent) and California (13 percent).
- An innovative approach to design and remedial action was implemented at the Formerly Utilized Sites Remedial Action Project. The Chapman Valve Site was designated for cleanup of low levels of residual uranium resulting from machining operations conducted in support of the Nation's early atomic research program. By combining the innovative dose-base remediation approach, which included the use of supplemental limits/hazard assessment and various waste volume reduction techniques, the final project costs were reduced from the original estimate of $4.3 million to $2 million, a savings of $2.3 million. Waste volumes were reduced from the original estimate of 9,000 cubic feet to 460 cubic feet, a reduction of approximately 95 percent.
- The Idaho National Engineering Laboratory launched an alternate fuel vehicle program. Initially, four buses and 70 vehicles will be converted to compressed natural gas or liquefied natural gas fuel. The current fleet of 150 buses and 700 light-duty vehicles uses a total of 1.6 million gallons of diesel and gasoline fuel each year.
- The Lawrence Berkeley National Laboratory shipped approximately 2,300 tons of concrete shielding to the Brookhaven National Laboratory for reuse in the Relativistic Heavy Ion Collider. This collaborative project, supported by the Energy Research and Environmental Management programs, resulted in an estimated savings of $7.2 million in 1995. The Lawrence Berkeley National Laboratory has begun work on an environmental assessment for the possible release of most of the remaining concrete shielding.
- At the Lawrence Livermore National Laboratory, a microseparator was used to separate the over-sprayed paint solids from recirculated water in the spray booth. This unit reduced waste generation from 11.8 metric tons in calendar year 1993 to zero in calendar year 1995, saving approximately $354,500.
- An equipment transfer program at the Oak Ridge K-25 Site transferred contaminated uranium hexafluoride gaseous diffusion enrichment equipment such as pumps, motors, and valves to operating gaseous diffusion plants for reuse. During calendar year 1995, approximately $2 million in cost savings was achieved by transferring 98,960,000 kilograms of enrichment equipment to the Portsmouth Gaseous Diffusion Plant in Portsmouth, Ohio.
- The decontamination of tritium-contaminated beryllium parts at the Pantex Plant and their reserves at the Idaho National Engineering Laboratory has contributed to a savings of more than $1 million.
- The Princeton Plasma Physics Laboratory continues to recycle most of its waste tritium by sending it to the Savannah River Site. In 1995, a Tritium Purification System was installed at the Princeton Plasma Physics Laboratory to recover tritium used in the Tokamak Fusion Test Reactor. Twenty-four shipping containers with 1,200 cubic feet of tritium waste were recycled, and 235,196 curies of tritium were recovered, saving $843,600. ■

DISCLAIMER

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Chapter 1.0 INTRODUCTION

1.1 Pollution Prevention Program Mission and Goals

The mission of DOE's Pollution Prevention Program is to reduce the generation and release of DOE wastes and pollutants by implementing cost-effective pollution prevention techniques, practices, and policies. 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.

Waste reduction goals (Table 1.1) were established by the Secretary of Energy in the *Pollution Prevention Program Plan 1996* (DOE/S-0118). This Plan 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.

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 this current *Annual Report of Waste Generation and Pollution Prevention Progress 1995*, 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 1995* is intended to be used as a management tool by DOE managers to determine sites and locations where waste generation is 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 reflect retrieval of previously generated wastes as part of a cleanup effort. Care must be taken to not misinterpret waste data 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

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.

and specific pollution prevention activities has been identified to enable accurate evaluation of pollution prevention efforts.

1.3 Scope

The scope of the information included in this Report is similar to that of previous years (Table 1.2). Data were collected on wastes generated in 1995, and pollution prevention activities and progress through 1995. Secondary wastes generated in 1995 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).

1.4 Methodology

The *Waste Minimization Reporting System (WMINRS)* and supporting system enhanced the accuracy and consistency of the data obtained for this Report. 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.

Table 1.2 Information Included/ Excluded from this Report

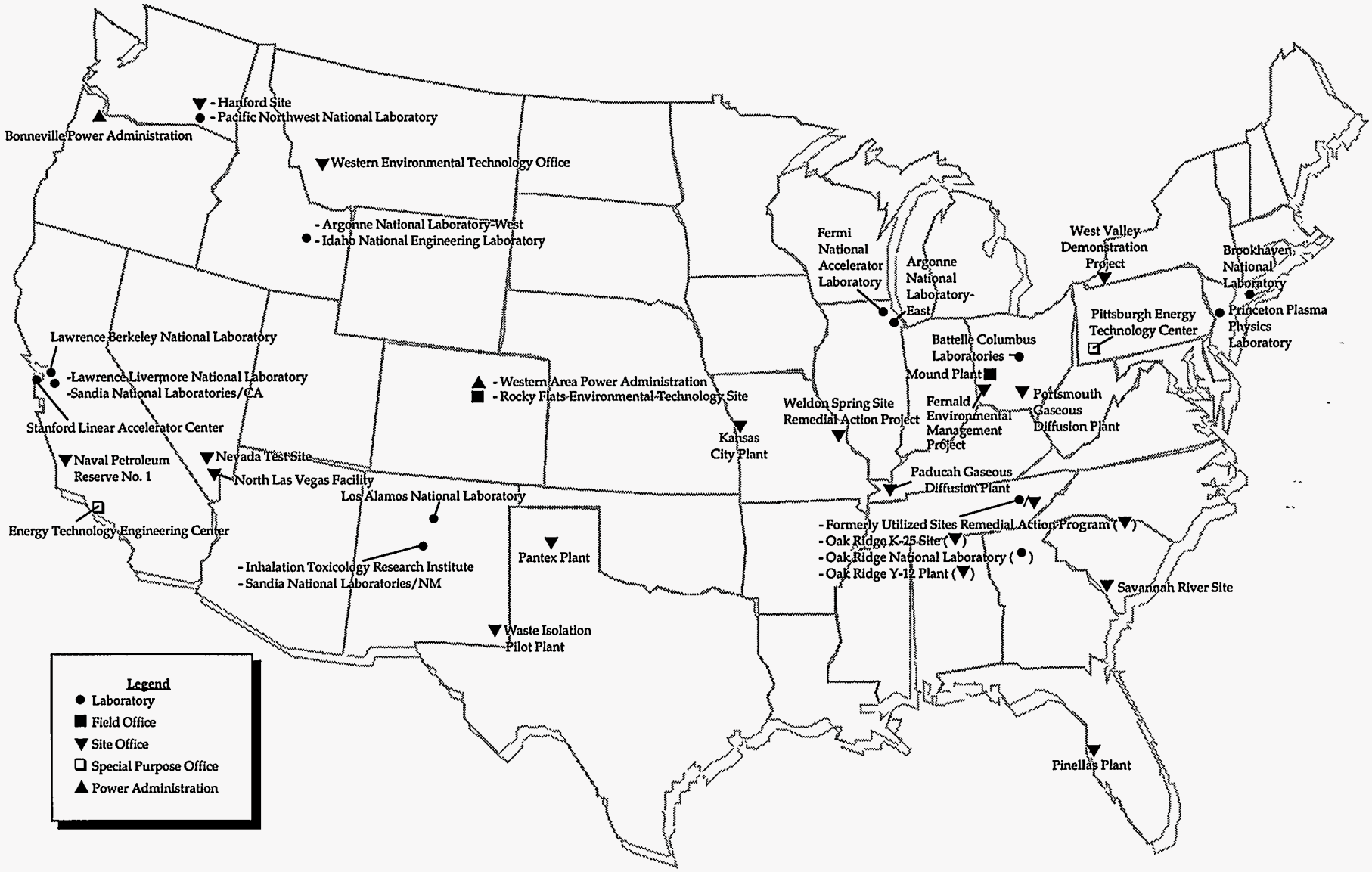
Included:

- High-level waste type category.
- The transuranic waste type category includes mixed transuranic waste.
- 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.
- The sanitary waste type category includes routine operations and cleanup/stabilization wastes.
- Process wastewater data was an optional reporting item in 1995. Any process wastewater data submitted are provided in Appendix B, and are not included in the data totals or text of this Report.

Excluded:

- Classified wastes.
- Spent fuel.
- 11e(2) byproduct material.
- Wastes generated by Naval Reactors Facilities and Naval Shipyards.

Figure 1.1 The 40 DOE Reporting Sites for 1995



Data validation was given a high priority, and a series of checks and cross-checks was implemented to validate the data received from the reporting sites. The 1995 data were compared against data reported for 1994, and were then compared against prior year data. Any resulting questions were resolved by the individual reporting site or its operations office.

1.5 Changes Since the 1994 Report

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 1.3 also changed. In 1995, the total number of reporting sites increased from 39 to 40 (see Figure 1.1 for reporting site locations). One site that reported in 1994 did not meet the threshold for reporting in 1995 (the Ames Laboratory), and two sites, the Naval Petroleum Reserve No. 1 and the Waste Isolation Pilot Plant, were added in 1995. The Savannah River Site was transferred from Defense Programs to the Environmental Management program, and Battelle Columbus Laboratories was transferred from the Chicago Operations Office to the Ohio Operations Office.

Table 1.3 1995 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 greater 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.

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, and coordinate DOE's waste minimization and pollution prevention program.

1.6 Report Structure

This Report is organized into six chapters and four appendices (Table 1.4). ■

Table 1.4 1995 Report Structure

- **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.
- **Chapter 3.0** presents waste generation by DOE program.
- **Chapter 4.0** presents a summary of waste generation and pollution prevention activities for each operations office.
- **Chapter 5.0** presents DOE waste generation and recycling activities for each State.
- **Chapter 6.0** presents fact sheets on each of the DOE reporting sites.
- **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 1994.
- **Appendix C** provides a glossary of terms.
- **Appendix D** provides 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, and these wastes are categorized as routine operations or cleanup/stabilization. In 1995, for the first time, the majority of sites reported sanitary waste data as either routine operations or cleanup/stabilization. Sanitary waste generated by the DOE complex is the result of housekeeping and construction activities. Sanitary waste data were available for 36 of the 40 reporting sites, and Table 2.1 identifies waste types and categories by reporting site. The four sites that did not track or report sanitary waste are Battelle Columbus Laboratories, Bonneville Power Administration, Formerly Utilized Sites Remedial Action Project, and Pacific Northwest National Laboratory.

2.1 *DOE Complex-Wide Waste Generation*

During 1995, DOE complex-wide waste generation reached 155,952 cubic meters, excluding sanitary waste. Most of this waste generation (80 percent) was generated by cleanup/stabilization activities. Table 2.2 compares 1995 complex-wide routine operations and cleanup/stabilization waste generation against 1993 and 1994 generation, and provides the percentage of the waste generated. Figure 2.1 illustrates waste generation by waste type and 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 generation of routine operations waste decreased from 1991 to 1995, excluding sanitary waste, by 58 percent (Table 2.3). From 1993 (DOE's baseline year) to 1995, routine operations waste generation decreased by 43 percent. Routine operations wastes generated by the DOE complex include high-level, transuranic, low-level radioactive, low-level mixed, and hazardous. Table 2.3 illustrates DOE complex-wide routine operations waste generation trends by waste type from 1991 through 1995.

Routine operations waste generation trends from 1991 to 1995, the secretarial goals, and the reduction required to meet these goals is illustrated in Table 2.4. DOE has estimated the avoided cost from the reduced

Table 2.1 Waste Types Generated by the 1995 Reporting Sites

Site Name	Routine Operations Waste						Cleanup/Stabilization Waste						Process Wastewater
	HLW	TRU	LLR	LLM	Haz	San	HLW	TRU	LLR	LLM	Haz	San	
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			✓		✓	✓			✓		✓	✓	San
Kansas City Plant			✓		✓	✓			✓		✓		San
Lawrence Berkeley National Laboratory			✓	✓	✓	✓			✓		✓	✓	Haz
Lawrence Livermore National Laboratory		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	LLR, LLM, Haz, San
Los Alamos National Laboratory		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	LLR
Mound Plant			✓		✓	✓		✓	✓	✓		✓	LLR
Naval Petroleum Reserve No. 1					✓	✓					✓		Haz
Nevada Test Site					✓	✓			✓	✓	✓		
North Las Vegas Facility					✓	✓							Haz
Oak Ridge K-25 Site			✓	✓		✓			✓	✓		✓	LLM
Oak Ridge National Laboratory		✓	✓	✓	✓	✓		✓	✓	✓	✓		LLM, Haz
Oak Ridge Y-12 Plant			✓	✓		✓			✓	✓		✓	LLR, LLM, San
Pacific Northwest National Laboratory		✓	✓	✓	✓			✓	✓	✓			
Paducah Gaseous Diffusion Plant						✓			✓	✓			
Pantex Plant			✓	✓	✓	✓			✓		✓	✓	
Pinellas Plant			✓						✓		✓	✓	
Pittsburgh Energy Technology Center					✓	✓							
Portsmouth Gaseous Diffusion Plant									✓	✓	✓	✓	Haz
Princeton Plasma Physics Laboratory			✓		✓	✓							
Rocky Flats Environmental Technology Site		✓	✓	✓	✓	✓			✓	✓	✓		
Sandia National Laboratories/California			✓	✓	✓	✓			✓		✓	✓	Haz, San
Sandia National Laboratories/New Mexico			✓	✓	✓	✓			✓	✓	✓	✓	
Savannah River Site	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Stanford Linear Accelerator Center					✓	✓			✓		✓		
Waste Isolation Pilot Plant					✓	✓					✓		
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	8	25	19	31	33	0	6	29	22	28	19	

Waste Type Key

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

Table 2.2 Complex-Wide Waste Generation 1993 – 1995
(in Cubic Meters)*

	Routine Operations			Cleanup/Stabilization		
Waste Category	*1993*	*1994*	*1995*	*1993*	*1994*	*1995*
Radioactive	**38,223**	32,557	24,113	**87,957**	46,542	93,124
	22%	19%	19%	**54%**	55%	41%
Mixed	**3,380**	2,837	1,868	**10,520**	13,040	5,563
	2%	2%	2%	**6%**	15%	2%
Hazardous*	**13,424**	14,387	5,452	**45,094**	16,230	25,832
	8%	8%	4%	**28%**	19%	11%
Sanitary*	**117,040**	119,561	92,544	**18,934**	9,432	103,387
	68%	71%	75%	**12%**	11%	45%
TOTALS	*172,067*	*169,342*	*123,977*	*162,505*	*85,244*	*227,906*

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

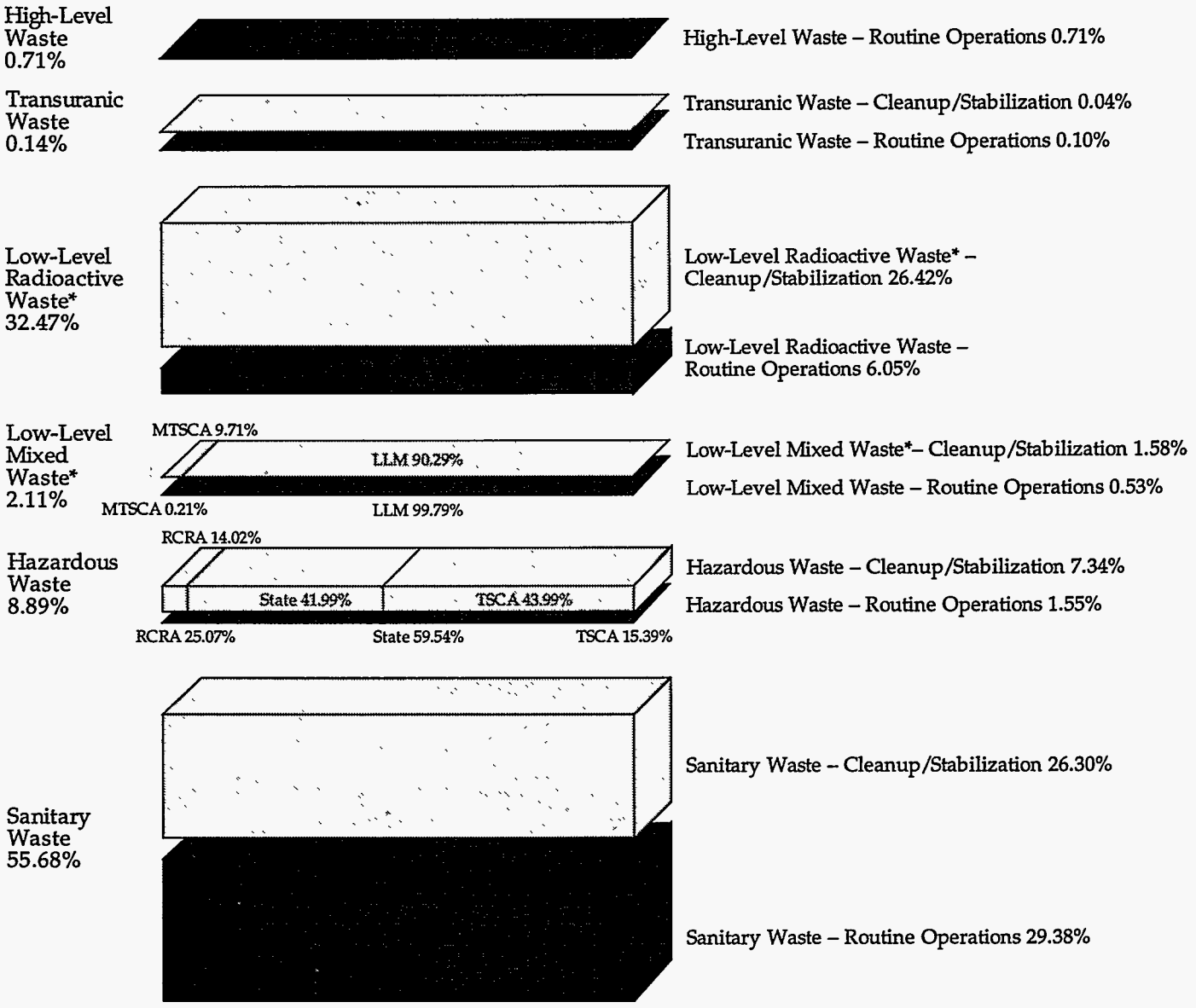
generation rate of routine operations waste from 1993 to 1995 to be $65 million (Table 2.5).

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.

As shown in Table 2.6, the reporting sites generated 124,519 cubic meters of cleanup/stabilization waste in 1995 (excluding 11e(2) byproduct material and sanitary waste), which represents 35 percent of the total DOE waste generated. **Cleanup/stabilization waste generation decreased 13 percent from 1993 to 1995 excluding sanitary waste (Table 2.6), with decreases in low-level mixed and hazardous waste.** ■

Figure 2.1 Total 1995 DOE Waste Generation by Routine Operations and Cleanup/Stabilization Waste Categories



Waste Type Key

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

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

Table 2.3 DOE Complex-Wide Routine Operations Waste Generation Trend 1991 – 1995
(in Cubic Meters)*

	Routine Operations				
Waste Type	*1991*	*1992*	*1993*	*1994*	*1995*
High-Level	3,078	1,684	**1,708**	2,071	2,496
Transuranic	932	682	**941**	568	336
Low-Level Radioactive	49,479	30,616	**35,574**	29,918	21,281
Low-Level Mixed	7,275	6,244	**3,380**	2,837	1,868
Hazardous*	13,653	10,119	**13,424**	14,387	5,452
Sanitary**	106,214	94,308	**117,040**	119,561	92,544
*Total Excluding Sanitary Waste**	*74,417*	*49,345*	*55,027*	*49,781*	*31,433*
*GRAND TOTAL**	*180,631*	*143,653*	*172,067*	*169,342*	*123,977*

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

** *In 1991 and 1992, all sites reported sanitary waste as routine operations waste. In 1993, some sites optionally separated and reported sanitary waste as routine operations or cleanup/stabilization waste. Beginning in 1994, sanitary waste was required to be separated and reported as routine operations or cleanup/stabilization.*

Table 2.4 Generation of Routine Operations Waste, 1993 and 1995
(in Cubic Meters)*

Waste Type	*1993*	*1995*	*Net Change 1993 to 1995*	*Secretarial Goal Reduction*	*Reduction to Achieve Goal*
Low-Level Radioactive	35,574	21,281	- 14,293	50%	3,494
Low-Level Mixed	3,380	1,868	- 1,512	50%	178
Hazardous*	13,424	5,452	- 7,972	50%	- 1,260
Sanitary*	117,040	92,544	- 24,496	33%	14,127
TOTALS	*169,418*	*121,145*	*- 48,273*	n/a	*16,539*

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

Table 2.5 Cost Avoided from Reduced Routine Operations Waste Generation in 1995 as Compared to the 1993 Baseline

Waste Type	*Net Change 1993 to 1995 (Cubic Meters)*	*Cost Per Cubic Meter**	*Cost Avoided (Rounded to the nearest $100,000)*
High-Level	788	$84,000	($ 66,200,000)
Transuranic	- 605	$48,000	$ 29,000,000
Low-Level Radioactive	- 14,293	$ 1,300	$ 18,600,000
Low-Level Mixed	- 1,512	$11,000	$ 16,600,000
Hazardous	- 7,972	$ 8,400	$ 67,000,000
TOTALS	*- 23,594*	*N/A*	*$ 65,000,000*

* *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.*

Table 2.6 DOE Complex-Wide Cleanup/Stabilization Waste Generation Trend 1991 – 1995

(in Cubic Meters)*

	Cleanup/Stabilization				
Waste Type	*1991*	*1992*	*1993*	*1994*	*1995*
High-Level	0	0	**0**	0	0
Transuranic	6	126	**234**	192	156
Low-Level Radioactive	15,448	18,852	**87,723**	44,279	92,968
Low-Level Mixed	950	882	**10,520**	13,040	5,563
Hazardous*	6,259	22,511	**45,094**	16,230	25,832
Sanitary**	0	0	**18,934**	9,432	103,387
*Total Excluding Sanitary Waste**	*22,663*	*42,371*	*143,571*	*73,741*	*124,519*
*GRAND TOTAL**	*22,663*	*42,371*	*162,505*	*83,173*	*227,906*

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

** *In 1991 and 1992, all sites reported sanitary waste as routine operations waste. In 1993, some sites optionally separated and reported sanitary waste as routine operations or cleanup/stabilization waste. Beginning in 1994, sanitary waste was required to be separated and reported as routine operations or cleanup/stabilization.*

Chapter 3.0 Waste Generation by Program

This Chapter presents waste generation by program within the DOE complex in 1995.

The quantity and category of waste generated by each DOE program in 1995 is presented in Table 3.1. Figures 3.1 and 3.2 illustrate DOE routine operations and cleanup/stabilization waste generation trends by program from 1991 through 1995 (excluding sanitary waste).

In 1995, only the Environmental Management program generated high-level waste. The Environmental Management program generated 94 percent of the total low-level radioactive waste volume in 1995, and also generated the largest volume of all types of waste, including sanitary. In the same year, Defense Programs, Energy Research, Power Marketing Administration, and the Environmental Management program generated more than 99 percent of the DOE complex-wide hazardous waste total.

3.1 *Environmental Management*

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 eliminated or reduced to meet Federal, State, and local laws and regulations.

The Environmental Management program was the largest generator of low-level radioactive waste in 1995 (107,302 cubic meters). This program generated 84 percent of the DOE complex-wide waste total in 1995 (excluding sanitary waste). Decommissioning projects and associated environmental restoration activities at the Fernald Environmental Management Project accounted for 67 percent of DOE complex-wide low-level radioactive waste total.

3.2 *Defense Programs*

Defense Programs ensures the safety, reliability, and performance of nuclear weapons without underground nuclear testing. 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 was the second greatest generator of transuranic, low-level radioactive, low-level mixed, and sanitary waste in 1995 (109 cubic meters, 3,507 cubic meters, 170 cubic meters, and 63,798 metric tons, respectively). This program generated four percent of the DOE complex-wide waste total in 1995 (excluding sanitary waste). The

Table 3.1 1995 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	**0**	87	22	**109**
Energy Research	**0**	1	84	**85**
Environmental Management	**2,496**	238	50	**288**
Nuclear Energy	**0**	10	0	**10**
Power Marketing Administration	**0**	0	0	**0**
Others**	**0**	0	0	**0**
TOTALS	*2,496*	*336*	*156*	*492*

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	2,758	749	**3,507**	88	82	**170**
Energy Research	1,263	435	**1,698**	49	32	**81**
Environmental Management	15,845	91,457	**107,302**	1,716	5,409	**7,125**
Nuclear Energy	1,366	300	**1,666**	15	40	**55**
Power Marketing Administration	0	0	**0**	0	0	**0**
Others**	49	27	**76**	0	0	**0**
TOTALS	*21,281*	*92,968*	*114,249*	*1,868*	*5,563*	*7,431*

Program	Hazardous*			Sanitary*		
	Routine Operations	Cleanup/ Stabilization	Total Hazardous	Routine Operations	Cleanup/ Stabilization	Total Sanitary
Defense Programs	1,176	1,487	**2,663**	48,533	15,265	**63,798**
Energy Research	1,937	8,255	**10,192**	10,129	1,794	**11,923**
Environmental Management	779	13,112	**13,891**	30,211	80,787	**110,998**
Nuclear Energy	53	4	**57**	1,751	0	**1,751**
Power Marketing Administration	1,448	2,840	**4,288**	237	5,452	**5,689**
Others**	59	134	**193**	1,683	89	**1,772**
TOTALS	*5,452*	*25,832*	*31,284*	*92,544*	*103,387*	*195,931*

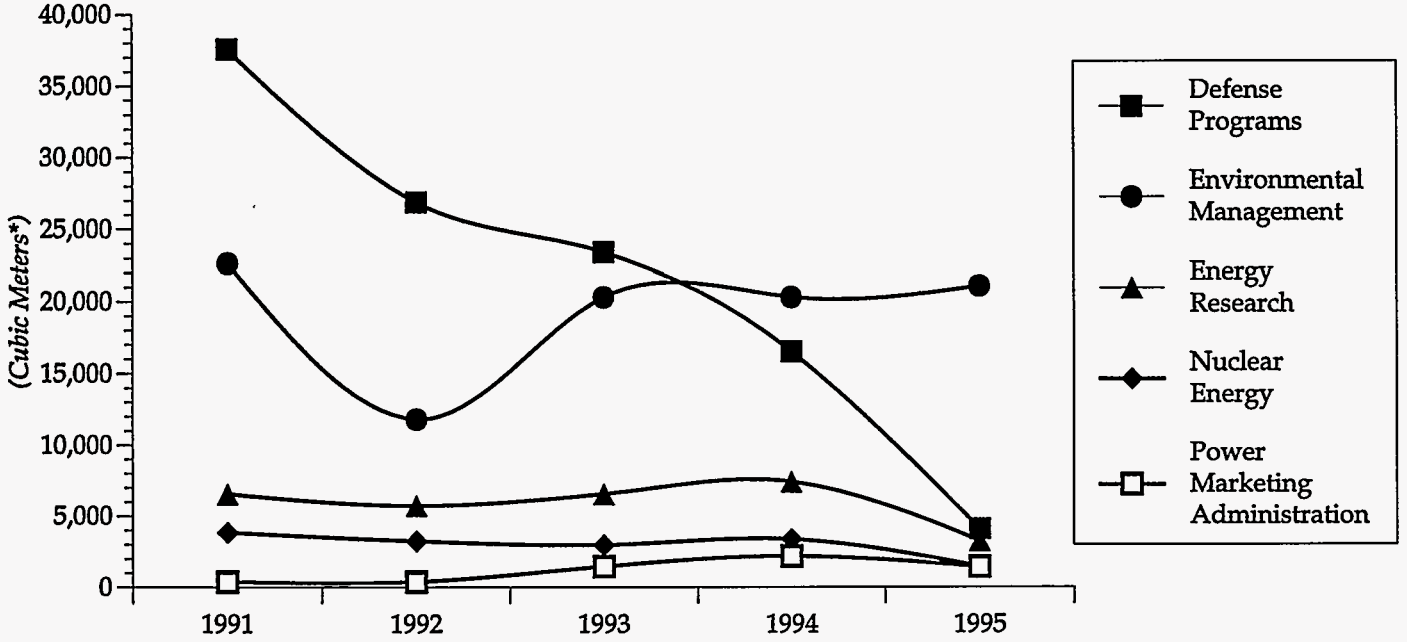
* *Assuming one cubic meter is equivalent to one metric ton.*

** *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 – 1995



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

Los Alamos National Laboratory generated the greatest volume of all of the waste types, excluding sanitary waste (93 cubic meters, 1,330 cubic meters, 67 cubic meters, and 344 metric tons, respectively). The major waste generators at the Los Alamos National Laboratory are the Chemistry and Metallurgy Research Building, Sigma Complex, and the Technical Area-55 Plutonium Facility. The Oak Ridge Y-12 Plant generated the greatest volume of sanitary waste in 1995, due to building demolition activities.

3.3 *Energy Research*

Energy Research performs basic research in energy-related areas, performs technological development and management of the High Energy and Nuclear Physics programs, and conducts fundamental research in energy, matter, and the basic forces of nature.

In 1995, the Energy Research Program generated relatively small quantities of transuranic, low-level radioactive, and low-level mixed waste. This program generated eight percent of the DOE complex-wide waste total in 1995 (excluding sanitary waste). Because Energy Research operates a large percentage of the DOE facilities, it contributed approximately 33 percent of the total hazardous waste generated in the DOE complex in 1995. The Argonne National Laboratory–East generated the greatest volume of Toxic Substances Control Act regulated hazardous waste in 1995, due to an offsite cleanup effort.

3.4 *Nuclear Energy*

Nuclear Energy provides technical leadership to address critical domestic and international nuclear issues. This program generated one percent of the DOE complex-wide waste total in 1995 (excluding sanitary waste and waste generated by the Naval Nuclear Propulsion Program [NE-60]).

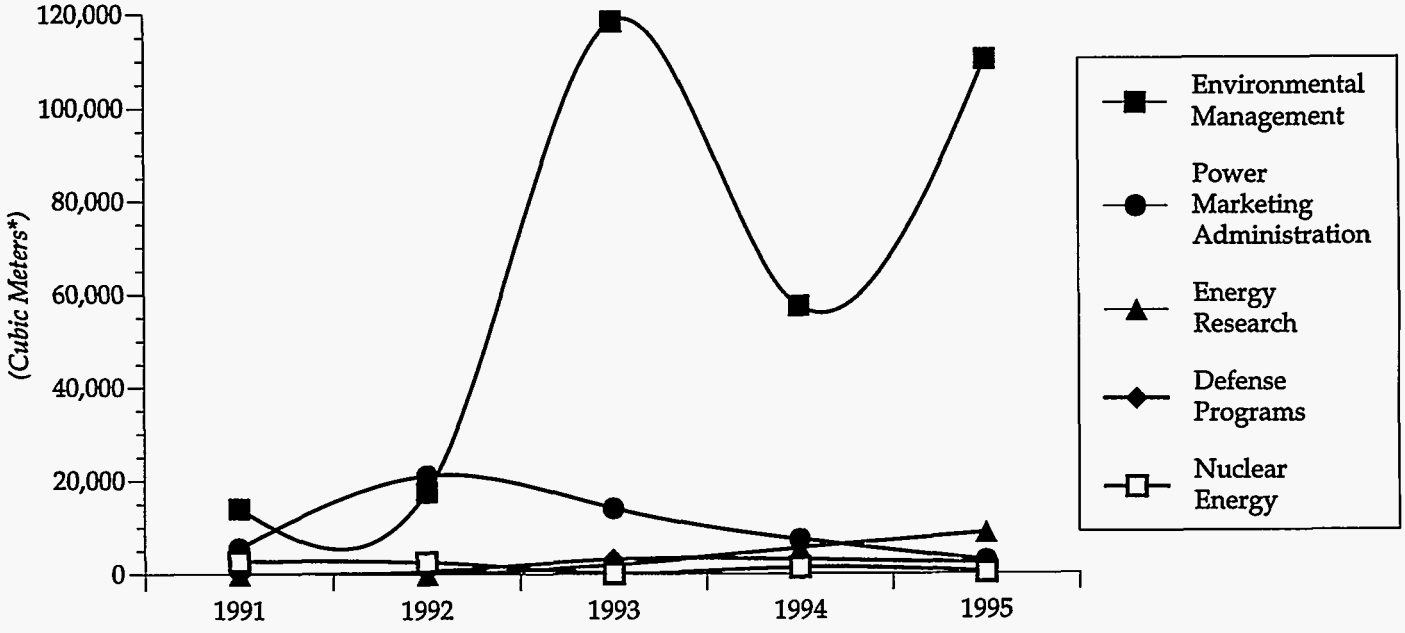
3.5 *Power Marketing Administration*

The Power Marketing Administration provides energy services and maintains electrical transmission facilities, and generates waste during environmental restoration activities, maintenance, and replacement of equipment containing polychlorinated biphenyl insulator fluids. **The Power Marketing Administration generated three percent of the DOE complex-wide waste total in 1995 (excluding sanitary waste).**

3.6 *Other Programs*

DOE programs that generated less than 300 cubic meters of waste in 1995 (excluding sanitary waste) are categorized as "Other" programs. These programs

Figure 3.2 DOE Complex-Wide Cleanup/Stabilization Waste Generation by Program 1991 – 1995



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

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 Energy Efficiency and Renewable Energy generated the greatest amounts of waste (164 metric tons and 64 cubic meters, respectively). These programs generated less than one percent of the DOE complex-wide waste total in 1995 (excluding sanitary waste).

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. ■

Table 3.2 DOE Complex-Wide Routine Sanitary Waste Generation by Program 1991 – 1995
(in Cubic Meters)*

Program	*1991*	*1992*	*1993*	*1994*	*1995*
Defense Programs	48,066	56,039	**66,573**	67,497	48,533
Environmental Management	50,824	29,004	**22,095**	28,367	30,211
Energy Research	10,271	8,921	**8,994**	8,204	10,129
Nuclear Energy	4,612	3,115	**3,639**	1,170	1,751
Power Marketing Administration	243	263	**8,254**	6,586	237

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

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 1995.

Table 4.1 lists the 1995 reporting sites managed by each operations office and the sites that report directly to Headquarters. Table 4.2 presents the quantities of each waste type generated by the Operations Offices and Headquarters in 1995.

Figures 4.1, 4.2, and 4.3 illustrate DOE complex-wide routine operations, cleanup/stabilization, and sanitary waste generation trends by operations office from 1991 through 1995.

4.1 *Headquarters*

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 1995, DOE Headquarters reporting sites generated 4,450 metric tons of hazardous waste (14 percent of the DOE complex-wide total), and 7,461 metric tons of sanitary waste (four percent of the DOE complex-wide total). High-level, transuranic, low-level radioactive, and low-level mixed waste were not generated by Headquarters reporting sites in 1995.

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 commercialization, and national energy objectives.

Albuquerque Operations Office reporting sites generated 36,593 cubic meters of waste in 1995, approximately 10 percent of the DOE complex-wide waste generation total. Sanitary waste generation of 22,164 metric tons constituted 61 percent of all waste generated by this operations office, and 11 percent of all sanitary waste generated by the DOE complex.

In 1995, Albuquerque Operations Office reporting sites generated 94 cubic meters of transuranic waste, approximately 19 percent of the DOE complex-wide total for this waste type. All of the transuranic waste was generated at the Los Alamos National Laboratory, primarily due to plutonium processing, decommissioning activities, and the upgrading of two facilities. Only a small quantity of low-level

Table 4.1 DOE Operations Offices and Reporting Sites, 1995

Operations Office	*Reporting Sites*
Headquarters	– Bonneville Power Administration – Naval Petroleum Reserve No. 1 – 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 – Waste Isolation Pilot Plant
Chicago	– Argonne National Laboratory-East – Argonne National Laboratory-West – 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	– Battelle Columbus Laboratories – Fernald Environmental Management Project – Mound Plant – West Valley Demonstration Project
Richland	– Hanford Site – Pacific Northwest National Laboratory
Rocky Flats	– Rocky Flats Environmental Technology Site
Savannah River	– Savannah River Site

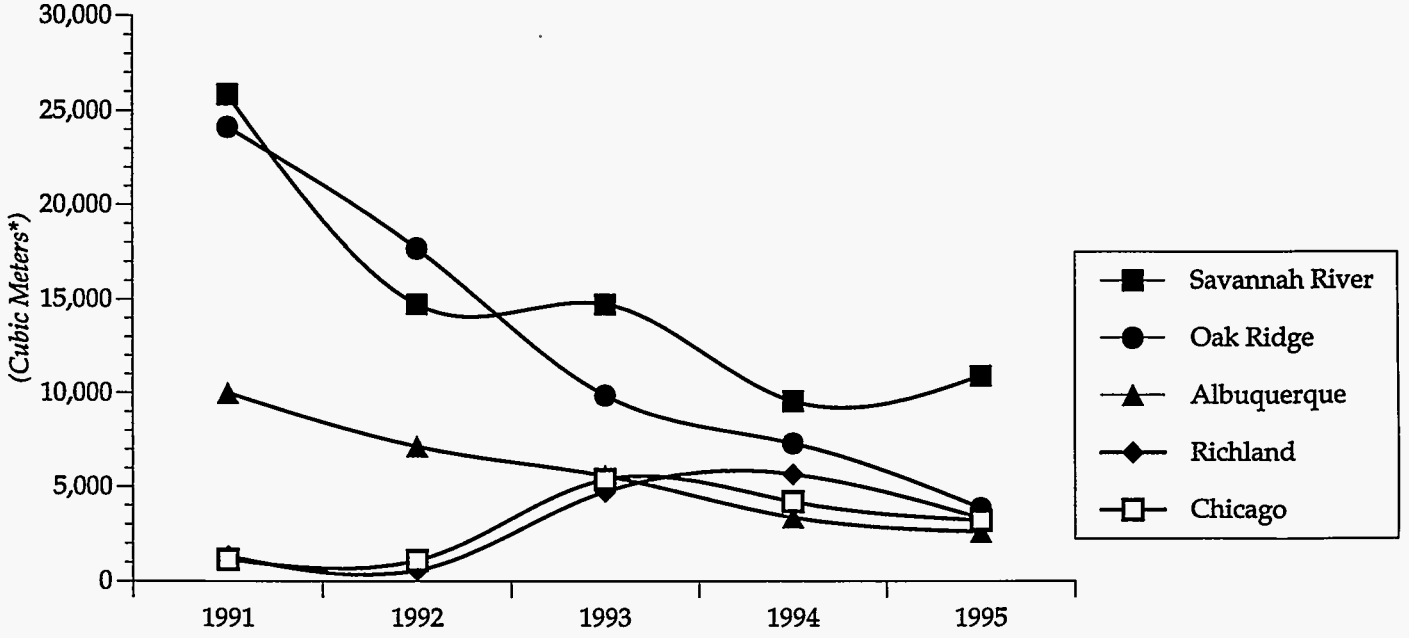
Table 4.2 1995 Waste Generation by Operations Office and Waste Type (in Cubic Meters)*

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	82	12	94	1,394	4,893	6,287
Chicago	0	10	19	29	1,554	329	1,883
Idaho	175	0	0	0	1,978	1,109	3,087
Nevada	0	0	0	0	0	34	34
Oakland	0	6	10	16	147	547	694
Oak Ridge	0	4	1	5	2,966	10,711	13,677
Ohio	0	0	30	30	1,973	74,447	76,420
Richland	0	69	84	153	2,420	830	3,250
Rocky Flats	0	24	0	24	794	10	804
Savannah River	2,321	141	0	141	8,055	58	8,113
TOTALS	*2,496*	*336*	*156*	*492*	*21,281*	*92,968*	*114,249*

Operations Office	Low-Level Mixed‡			Hazardous*			Sanitary*		
	Routine Operations	Cleanup/ Stabilization	Total Low-Level Mixed	Routine Operations	Cleanup/ Stabilization	Total Hazardous	Routine Operations	Cleanup/ Stabilization	Total Sanitary
Headquarters	0	0	0	1,479	2,971	4,450	1,920	5,541	7,461
Albuquerque	55	300	355	1,076	6,617	7,693	11,896	10,268	22,164
Chicago	22	35	57	1,636	12,797	14,433	4,709	0	4,709
Idaho	6	67	73	29	2	31	7,572	43,075	50,647
Nevada	0	4	4	61	1,518	1,579	13,728	0	13,728
Oakland	27	71	98	532	1,597	2,129	7,787	6,743	14,530
Oak Ridge	840	1,378	2,218	44	29	73	28,976	33,857	62,833
Ohio	5	811	816	161	35	196	4,285	1,462	5,747
Richland	496	46	542	329	168	497	6,824	0	6,824
Rocky Flats	96	2,486	2,582	48	93	141	2,502	0	2,502
Savannah River	321	365	686	57	5	62	2,345	2,441	4,786
TOTALS	*1,868*	*5,563*	*7,431*	*5,452*	*25,832*	*31,284*	*92,544*	*103,387*	*195,931*

* *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).*

Figure 4.1 DOE Complex-Wide Routine Operations Waste Generation by Operations Office 1991 – 1995



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

mixed waste was generated in 1995 (355 cubic meters). High-level waste was not generated by Albuquerque Operations Office reporting sites in 1995.

Transuranic, low-level radioactive, low-level mixed, and hazardous waste generation increased in 1995. **Low-level radioactive waste generation increased due to an increase in cleanup activities at the Inhalation Toxicology Research Institute.** Low-level mixed waste generation increased due to secondary waste reported by the Los Alamos National Laboratory. **Hazardous waste generation increased at the Kansas City Plant, Los Alamos National Laboratory, and the Pantex Plant due to construction debris, reporting of secondary wastes, and renovation projects and mission change, respectively.**

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.

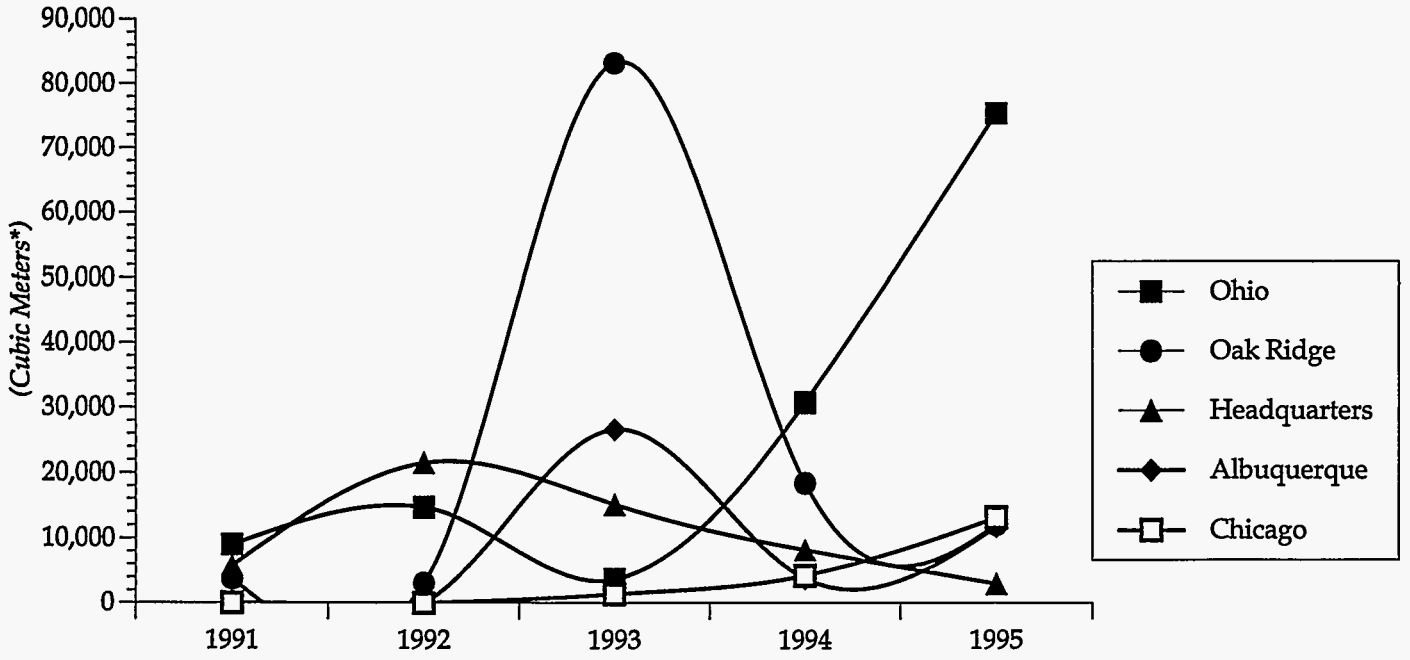
In 1995, Chicago Operations Office reporting sites generated 21,111 cubic meters of waste, approximately six percent of the DOE complex-wide waste generation total. Twenty-nine cubic meters of transuranic, 1,883 cubic meters of low-level radioactive, 57 cubic meters of low-level mixed, 14,433 metric tons of hazardous, and 4,709 metric tons of sanitary waste were generated in 1995. High-level waste was not generated by Chicago Operations Office reporting sites in 1995.

Transuranic, low-level radioactive, and low-level mixed waste generation decreased from 1994 to 1995. **Toxic Substances Control Act regulated hazardous waste generation increased due to an offsite cleanup effort performed in 1995 at the Argonne National Laboratory–East.**

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 4.2 DOE Complex-Wide Cleanup/Stabilization Waste Generation by Operations Office 1991 – 1995



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

In 1995, Idaho Operations Office reporting sites generated 54,013 cubic meters of waste, approximately 15 percent of the DOE complex-wide waste generation total. The wastes generated were primarily low-level radioactive (3,087 cubic meters) and sanitary (50,647 metric tons). High-level, transuranic, low-level mixed, and hazardous wastes were generated in small quantities.

Generation of all waste types decreased with the exception of sanitary waste, which increased from 389 metric tons in 1994 to 50,647 metric tons in 1995, primarily due to decommissioning projects and infrastructure upgrades.

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 1995, Nevada Operations Office reporting sites generated 34 cubic meters of low-level radioactive, four cubic meters of low-level mixed, 1,579 metric tons of hazardous, and 13,728 metric tons of sanitary waste, contributing four percent of the DOE complex-wide waste generation total. **Generation of all waste types decreased from 1994 to 1995.** High-level and transuranic waste were not generated by Nevada Operations Office reporting sites in 1995.

4.6 Oakland Operations Office

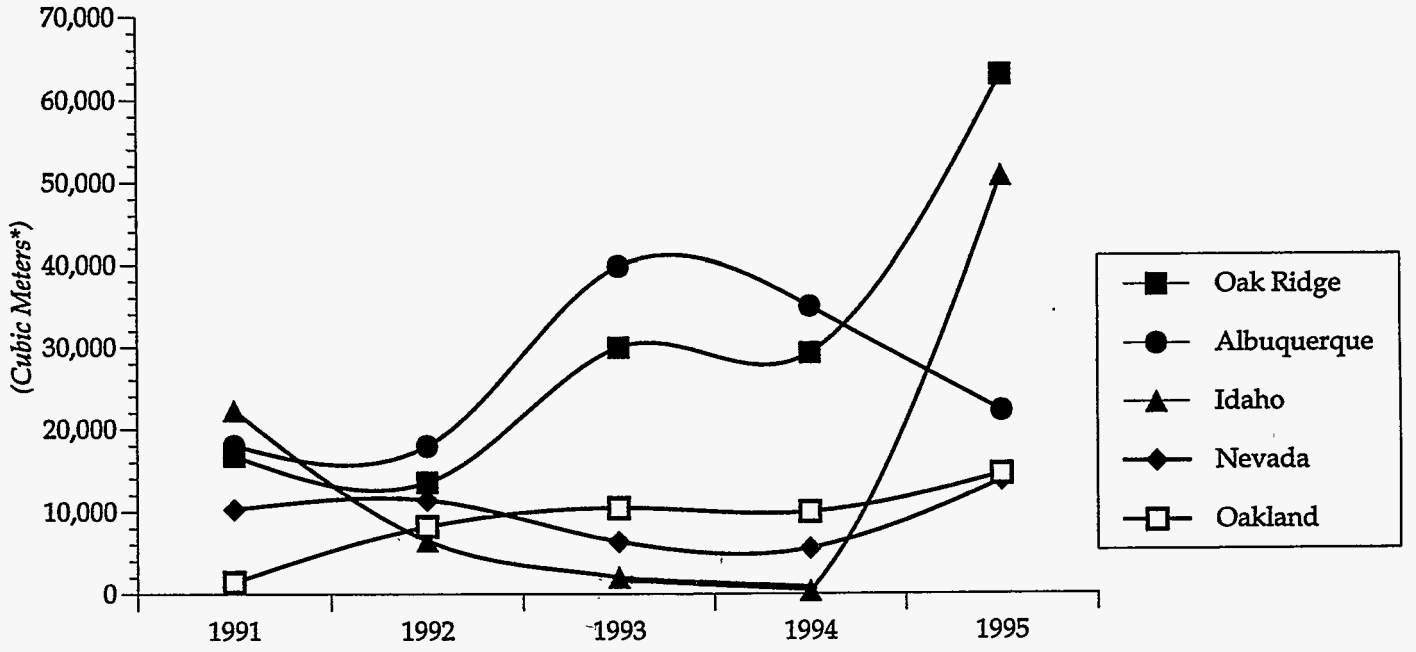
The Oakland Operations Office serves the public by managing world-class national research and development facilities, and by administering contracts to achieve DOE's program goals and priorities.

In 1995, Oakland Operations Office reporting sites generated 17,467 cubic meters of waste, five percent of the DOE complex-wide waste generation total. Sanitary waste was the largest waste volume generated (14,530 metric tons, 83 percent of the total). Hazardous waste generation totaled 2,129 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 1995. **Generation of all waste types decreased in 1995.**

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,

Figure 4.3 DOE Complex-Wide Sanitary Waste Generation by Operations Office 1991 – 1995



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

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 1995, Oak Ridge Operations Office reporting sites generated 22 percent of the DOE complex-wide waste generation total (78,806 cubic meters). Sanitary waste was the largest waste volume generated (62,833 metric tons). A total of 13,677 cubic meters of low-level waste was generated, as well as small quantities of transuranic, low-level mixed, and hazardous wastes. High-level waste was not generated by Oak Ridge Operations Office reporting sites in 1995.

There was a decrease in low-level radioactive, low-level mixed, and hazardous waste generation from 1994 to 1995. **Sanitary waste generation increased from 1994 to 1995 due to construction debris from demolition activities at the Oak Ridge K-25 Site.**

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 1995, Ohio Operations Office reporting sites generated 83,209 cubic meters of waste, 24 percent of the DOE complex-wide waste generation total. Approximately 92 percent (76,420 cubic meters) of the waste generated was low-level radioactive waste, and approximately seven percent (5,747 metric tons) was sanitary waste.

Low-level radioactive and low-level mixed waste generation increased in 1995 due to remediation field work at the Fernald Environmental Management Project. High-level waste was not generated by Ohio Operations Office reporting sites in 1995.

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 1995, Richland Operations Office reporting sites generated approximately 11,266 cubic meters of waste, three percent of the DOE complex-wide waste generation total. Low-level radioactive (3,250 cubic meters), low-level mixed (542 cubic meters), and sanitary waste (6,824 metric tons) were the largest waste volumes generated. **Generation of all waste types decreased from 1994 to 1995.**

Small quantities of transuranic and hazardous waste were generated in 1995. High-level waste was not generated by Richland Operations Office reporting sites in 1995.

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 1995, the Rocky Flats Operations Office reported 6,053 cubic meters of waste, two percent of the DOE complex-wide waste generation total. Low-level mixed waste was the largest waste volume generated (2,582 cubic meters). Small quantities of transuranic, low-level radioactive, hazardous, and sanitary waste were generated. High-level waste was not generated in 1995.

Low-level radioactive waste generation increased in 1995 due to renovation work. Low-level mixed waste generation increased due to environmental restoration work performed at the Building 904 pad and solar ponds. Hazardous waste generation increased due to efforts to manage excess chemicals, and due to renovations generating asbestos materials.

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 1995, the Savannah River Site generated 16,109 cubic meters of waste, five percent of the DOE complex-wide waste generation total. Low-level radioactive waste (8,113 cubic meters) and sanitary waste (4,786 metric tons) were the largest waste volumes generated. Due to stabilization activities, the Savannah River Operations Office is the major source of high-level waste generation within the DOE complex; 2,321 cubic meters of high-level waste was generated in 1995, which is 93 percent of the total high-level waste generated.

High-level waste generation increased from 1,764 cubic meters in 1994 to 2,321 cubic meters in 1995, due to continued cleanout and restart of the F-Canyon separation process.

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 1995. The following discussions identify the sites with the largest waste generation volume in 1995 categorized by the type of waste produced, not the operations office affiliation.

4.12.1 *High-Level Waste*

In 1995 as in the previous four years, only two sites reported generation of high-level waste: the Savannah River Site and the Idaho National Engineering Laboratory (Table 4.3). The Savannah River Site generated the largest volume of high-level waste in 1995 (2,321 cubic meters), accounting for 93 percent of the 1995 DOE complex-wide total.

4.12.2 *Transuranic Waste*

The Savannah River Site, Los Alamos National Laboratory, and the Pacific Northwest National Laboratory generated the largest volume of transuranic waste in 1995 (Table 4.4). Transuranic waste generation is attributed to routine operations activities (the largest amount generated is 141 cubic meters).

4.12.3 *Low-Level Radioactive Waste*

The Fernald Environmental Management Project generated the largest volume of low-level radioactive waste in 1995 (72,319 cubic meters), approximately

78 percent of the total cleanup/stabilization low-level radioactive waste generated (Table 4.5). This volume increased from 1994 to 1995 due to remediation activities.

4.12.4 Low-Level Mixed Waste

The Rocky Flats Environmental Technology Site and the Oak Ridge K-25 Site generated the largest volume of low-level mixed waste in 1995 (Table 4.6). The majority of this waste was generated at the Rocky Flats Environmental Technology Site due to environmental restoration work performed at the Building 904 pad and the solar ponds.

4.12.5 Hazardous Waste

The Argonne National Laboratory–East, the Bonneville Power Administration, and the Pantex Plant generated the largest volume of hazardous waste in 1995 (Table 4.7). Approximately 39 percent (12,166 metric tons) of the hazardous waste generated at the Argonne National Laboratory–East was due to an offsite cleanup effort.

4.12.6 Sanitary Waste

The Idaho National Engineering Laboratory generated the largest volume of sanitary waste in 1995 (50,647 metric tons), the result of decommissioning projects and infrastructure upgrades. Other significant generators of sanitary waste include the Oak Ridge K-25 Site, the Oak Ridge Y-12 Plant, and the Nevada Test Site (Table 4.8). ■

Table 4.3 High-Level Waste Generation in 1995 by Site
(in Cubic Meters)*

Site	Routine Operations	Cleanup/ Stabilization	*TOTAL*
Savannah River Site	2,321	0	*2,321*
Idaho National Engineering Laboratory	175	0	*175*
TOTAL	*2,496*	*0*	*2,496*

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

Table 4.4 Transuranic Waste Generation in 1995 by Site
(in Cubic Meters)*

Site	Routine Operations	Cleanup/ Stabilization	*TOTAL*
Savannah River Site	141	0	*141*
Los Alamos National Laboratory	82	12	*94*
Pacific Northwest National Laboratory	1	84	*85*
Hanford Site	68	0	*68*
Mound Plant	0	30	*30*
Argonne National Laboratory-East	10	19	*29*
Rocky Flats Environmental Technology Site	24	0	*24*
Lawrence Livermore National Laboratory	6	10	*16*
Oak Ridge National Laboratory	4	1	*5*
Energy Technology Engineering Center	0	<0.5	*<0.5*
Idaho National Engineering Laboratory	<0.5	0	*<0.5*
TOTAL	*336*	*156*	*492*

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

Table 4.5 Low-Level Radioactive Waste Generation in 1995 by Site
(in Cubic Meters)*

Site	Routine Operations	Cleanup/ Stabilization	*TOTAL*
Fernald Environmental Management Project	669	71,650	*72,319*
Savannah River Site	8,055	58	*8,113*
Formerly Utilized Sites Remedial Action Program	0	6,040	*6,040*
Portsmouth Gaseous Diffusion Plant	0	3,501	*3,501*
Idaho National Engineering Laboratory	1,978	1,109	*3,087*
Los Alamos National Laboratory	1,060	1,846	*2,906*
Hanford Site	2,234	625	*2,859*
Inhalation Toxicology Research Institute	47	2,676	*2,723*
Mound Plant	653	1,926	*2,579*
Oak Ridge K-25 Site	1,410	240	*1,650*
Oak Ridge National Laboratory	922	556	*1,478*
Argonne National Laboratory-East	545	322	*867*
Battelle Columbus Laboratories	0	827	*827*
Rocky Flats Environmental Technology Site	794	10	*804*
West Valley Demonstration Project	651	44	*695*
Brookhaven National Laboratory	661	0	*661*
Oak Ridge Y-12 Plant	634	12	*646*
Energy Technology Engineering Center	0	511	*511*
Pacific Northwest National Laboratory	186	205	*391*
Paducah Gaseous Diffusion Plant	0	362	*362*
Argonne National Laboratory-West	291	7	*298*
Sandia National Laboratories/California	17	229	*246*
Pantex Plant	171	14	*185*
Lawrence Livermore National Laboratory	117	19	*136*
Pinellas Plant	68	68	*136*
Sandia National Laboratories/New Mexico	24	58	*82*
Lawrence Berkeley National Laboratory	30	7	*37*
Fermi National Accelerator Laboratory	34	0	*34*
Nevada Test Site	0	34	*34*
Princeton Plasma Physics Laboratory	23	0	*23*
Stanford Linear Accelerator Center	0	10	*10*
Kansas City Plant	7	2	*9*
TOTAL	*21,281*	*92,968*	*114,249*

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

Table 4.6 Low-Level Mixed Waste Generation in 1995 by Site
(in Cubic Meters)*

Site	Routine Operations	Cleanup/ Stabilization	*TOTAL*
Rocky Flats Environmental Technology Site	96	2,486	*2,582*
Oak Ridge K-25 Site	742	514	*1,256*
Fernald Environmental Management Project	4	794	*798*
Savannah River Site	321	365	*686*
Hanford Site	475	31	*506*
Paducah Gaseous Diffusion Plant	0	429	*429*
Portsmouth Gaseous Diffusion Plant	0	373	*373*
Los Alamos National Laboratory	8	297	*305*
Oak Ridge Y-12 Plant	75	28	*103*
Idaho National Engineering Laboratory	6	67	*73*
Energy Technology Engineering Center	0	60	*60*
Oak Ridge National Laboratory	23	19	*42*
Argonne National Laboratory-East	20	21	*41*
Pacific Northwest National Laboratory	21	15	*36*
Lawrence Livermore National Laboratory	24	11	*35*
Pantex Plant	28	<0.5	*28*
Sandia National Laboratories/New Mexico	17	3	*20*
Brookhaven National Laboratory	1	14	*15*
Formerly Utilized Sites Remedial Action Program	0	12	*12*
Battelle Columbus Laboratories	0	10	*10*
West Valley Demonstration Project	1	6	*7*
Nevada Test Site	0	4	*4*
Lawrence Berkeley National Laboratory	3	<0.5	*3*
Weldon Spring Site Remedial Action Project	0	3	*3*
Sandia National Laboratories/California	2	0	*2*
Fermi National Accelerator Laboratory	1	0	*1*
Mound Plant	0	1	*1*
Argonne National Laboratory-West	<0.5	0	*<0.5*
Inhalation Toxicology Research Institute	<0.5	0	*<0.5*
Kansas City Plant	<0.5	0	*<0.5*
Pinellas Plant	0	<0.5	*<0.5*
TOTAL	*1,868*	*5,563*	*7,431*

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

Table 4.7 Hazardous Waste Generation in 1995 by Site
(in Cubic Meters)*

Site	Routine Operations	Cleanup/ Stabilization	*TOTAL*
Argonne National Laboratory-East	1,452	10,714	*12,166*
Bonneville Power Administration	1,340	2,836	*4,176*
Pantex Plant	384	2,698	*3,082*
Los Alamos National Laboratory	135	2,258	*2,393*
Fermi National Accelerator Laboratory	49	2,058	*2,107*
Nevada Test Site	58	1,518	*1,576*
Kansas City Plant	261	1,145	*1,406*
Stanford Linear Accelerator Center	170	911	*1,081*
Lawrence Livermore National Laboratory	296	526	*822*
Sandia National Laboratories/New Mexico	248	224	*472*
Hanford Site	286	168	*454*
Lawrence Berkeley National Laboratory	62	150	*212*
Pinellas Plant	0	186	*186*
Rocky Flats Environmental Technology Site	48	93	*141*
Naval Petroleum Reserve No. 1	7	131	*138*
Brookhaven National Laboratory	104	25	*129*
Mound Plant	113	0	*113*
Western Area Power Administration	108	4	*112*
Sandia National Laboratories/California	40	42	*82*
Oak Ridge National Laboratory	44	23	*67*
Savannah River Site	57	5	*62*
Waste Isolation Pilot Plant	2	59	*61*
West Valley Demonstration Project	48	0	*48*
Pacific Northwest National Laboratory	43	0	*43*
Fernald Environmental Management Project	0	35	*35*
Idaho National Engineering Laboratory	29	2	*31*
Argonne National Laboratory-West	22	0	*22*
Western Environmental Technology Office	15	0	*15*
Energy Technology Engineering Center	4	10	*14*
Inhalation Toxicology Research Institute	6	5	*11*
Pittsburgh Energy Technology Center	9	0	*9*
Princeton Plasma Physics Laboratory	9	<0.5	*9*
Weldon Spring Site Remedial Action Project	0	6	*6*
North Las Vegas Facility	3	0	*3*
TOTAL	*5,452*	*25,832*	*31,284*

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

Table 4.8 Sanitary Waste Generation in 1995 by Site
(in Cubic Meters)*

Site	Routine Operations	Cleanup/ Stabilization	*TOTAL*
Idaho National Engineering Laboratory	7,572	43,075	*50,647*
Oak Ridge K-25 Site	1,577	31,428	*33,005*
Oak Ridge Y-12 Plant	22,391	48	*22,439*
Nevada Test Site	12,960	0	*12,960*
Lawrence Livermore National Laboratory	2,042	6,634	*8,676*
Los Alamos National Laboratory	2,409	5,992	*8,401*
Hanford Site	6,824	0	*6,824*
Western Area Power Administration	237	5,452	*5,689*
Kansas City Plant	5,413	0	*5,413*
Lawrence Berkeley National Laboratory	5,079	109	*5,188*
Savannah River Site	2,345	2,441	*4,786*
Paducah Gaseous Diffusion Plant	3,821	0	*3,821*
Sandia National Laboratories/New Mexico	1,793	1,818	*3,611*
Rocky Flats Environmental Technology Site	2,502	0	*2,502*
Fernald Environmental Management Project	2,228	0	*2,228*
Inhalation Toxicology Research Institute	324	1,685	*2,009*
Mound Plant	668	1,283	*1,951*
Argonne National Laboratory-East	1,753	0	*1,753*
Argonne National Laboratory-West	1,751	0	*1,751*
Weldon Spring Site Remedial Action Project	0	1,597	*1,597*
West Valley Demonstration Project	1,389	179	*1,568*
Waste Isolation Pilot Plant	1,200	0	*1,200*
Oak Ridge National Laboratory	1,187	0	*1,187*
Western Environmental Technology Office	1,000	89	*1,089*
Portsmouth Gaseous Diffusion Plant	0	784	*784*
North Las Vegas Facility	768	0	*768*
Brookhaven National Laboratory	694	0	*694*
Pantex Plant	533	129	*662*
Sandia National Laboratories/California	224	374	*598*
Naval Petroleum Reserve No. 1	587	0	*587*
Stanford Linear Accelerator Center	581	0	*581*
Fermi National Accelerator Laboratory	335	0	*335*
Pinellas Plant	0	270	*270*
Princeton Plasma Physics Laboratory	176	0	*176*
Pittsburgh Energy Technology Center	96	0	*96*
Energy Technology Engineering Center	85	0	*85*
TOTAL	*92,544*	*103,387*	*195,931*

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

Chapter 5.0

POLLUTION PREVENTION ACTIVITIES AND STATE PROGRAMS

This Chapter provides an overview of 1995 waste generation, pollution prevention, and recycling efforts by the 40 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.

Table 5.1 presents the total 1995 routine operations, cleanup/stabilization, and sanitary waste generation quantities by waste type for the 25 States where DOE reporting sites are located. For 1995, sanitary waste data were available for 18 of the 25 reporting States.

5.1 *Routine Operations Waste*

The largest volume of routine operations waste (excluding sanitary waste) was generated in the State of South Carolina, accounting for approximately 35 percent of the DOE complex-wide total in 1995. The majority was generated by the Savannah River Site, due to the F-Canyon separation process and the change in low-level radioactive measurement. Activities in the State of Tennessee contributed approximately 12 percent of the total routine operations waste generated.

In 1995, 92,544 metric tons of routine operations sanitary waste were generated, approximately 75 percent of the DOE complex-wide waste total (Table 5.1). The largest generator was Tennessee's Oak Ridge Y-12 Plant, due to demolition activities.

5.2 *Cleanup/Stabilization Waste*

Low-level radioactive waste accounted for approximately 75 percent of the total DOE complex-wide cleanup/stabilization waste generated in 1995 (excluding sanitary waste), 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 1995 (67 percent), due to remediation activities at the Fernald Environmental Management Project.

In 1995, 103,387 metric tons of cleanup/stabilization sanitary waste were generated, approximately 45 percent of the DOE complex-wide waste total (Table 5.1). The largest generator was the Idaho National Engineering Laboratory, due to decommissioning projects and infrastructure upgrades.

5.3 *Recycling Activities*

Table 5.2 presents the quantities and types of materials recycled in 1995 on a State-by-State basis. The largest individual wastestream recycled consisted of items in the "Other" category, followed by the metals category. The recycling ratio (amount recycled divided by the sum of the amount recycled plus sanitary waste generation) is 0.30.

Recycling activities have increased overall since 1991, due to sites taking a more active role in recycling programs, and improved programs. However, better recordkeeping for sanitary waste generation has resulted in a decrease in the recycling ratio from 1994 (0.31) to 1995 (0.30). Greater recycling efforts are needed to achieve the Secretarial Goal of 0.33 by the end of 1999.

In 1995, overall DOE complex-wide recycling amounts continued to increase. However, the recycling amounts for some individual sites and Programs decreased in 1995, compared to 1994.

Recycling amounts for paper decreased in 1995 by approximately 5,132 metric tons. Individual sites that reported lower paper recycling amounts include the Argonne National Laboratory–East, Fernald Environmental Management Project, Nevada Test Site, and the Stanford Linear Accelerator Center. Recycling amounts for scrap metals remained almost the same in 1995 as in 1994 (22,075 metric tons versus 21,797 metric tons, respectively). Individual sites that reported significant decreases in scrap metals recycling amounts include the Argonne National Laboratory–East, Formerly Utilized Sites Remedial Action Program (FUSRAP), North Las Vegas Facility, Oak Ridge K-25 Site, Oak Ridge Y-12 Plant, Princeton Plasma Physics Laboratory, Rocky Flats Environmental Technology Site, and Sandia National Laboratories/California.

Decreases in paper and scrap metals amounts resulted in a lower recycling total for the Environmental Management program in 1995, compared to 1994. This reduction comes at a time when total sanitary waste amounts are increasing due to environmental restoration/deactivation and decommissioning activities. This trend of increasing sanitary waste generation from cleanup/stabilization operations is expected to continue, and because of this, greater recycling and reuse of materials from cleanup/stabilization activities will be necessary to increase the overall recycling ratio.

Site-specific recycling activities and accomplishments are described in the individual site Fact Sheets, which are presented alphabetically beginning on page 33. ■

Table 5.1 1995 DOE Waste Generation by State and Waste Type
(in Cubic Meters*)

State	High-Level Waste	Transuranic			Low-Level Radioactive			Low-Level Mixed			Hazardous*			Sanitary*			State Grand TOTAL
	Routine**	Routine	Cleanup/ Stabilization	TOTAL	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	6	0	6	0	0	0	6
California	0	6	10	16	164	776	940	29	71	100	627	1,770	2,397	8,598	7,117	15,715	19,168
Colorado	0	24	0	24	794	10	804	96	2,486	2,582	70	97	167	2,739	5,452	8,191	11,768
Florida	0	0	0	0	68	68	136	0	0	0	0	186	186	0	270	270	592
Idaho	175	0	0	0	2,269	1,116	3,385	6	67	73	51	2	53	9,323	43,075	52,398	56,084
Illinois	0	10	19	29	579	322	901	21	21	42	1,501	12,772	14,273	2,088	0	2,088	17,333
Kentucky	0	0	0	0	0	362	362	0	429	429	0	0	0	3,821	0	3,821	4,612
Massachusetts	0	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0	19
Michigan	0	0	0	0	0	133	133	0	0	0	0	0	0	0	0	0	133
Missouri	0	0	0	0	7	2	9	0	3	3	259	1,151	1,410	5,413	1,597	7,010	8,432
Montana	0	0	0	0	0	0	0	0	0	0	17	0	17	1,000	89	1,089	1,106
Nebraska	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1
Nevada	0	0	0	0	0	34	34	0	4	4	75	1,518	1,593	13,728	0	13,728	15,359
New Jersey	0	0	0	0	23	0	23	0	0	0	9	0	9	176	0	176	208
New Mexico	0	82	12	94	1,131	4,580	5,711	25	300	325	395	2,546	2,941	5,726	9,495	15,221	24,292
New York	0	0	0	0	1,312	1,649	2,961	2	25	27	152	25	177	2,083	179	2,262	5,427
North Dakota	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	4
Ohio	0	0	30	30	1,322	82,187	83,509	4	1,185	1,189	113	35	148	2,896	2,067	4,963	89,839
Oregon	0	0	0	0	0	0	0	0	0	0	1,340	2,836	4,176	0	0	0	4,176
Pennsylvania	0	0	0	0	0	0	0	0	0	0	9	0	9	96	0	96	105
South Carolina	2,321	141	0	141	8,055	58	8,113	321	365	686	57	5	62	2,345	2,441	4,786	16,109
Tennessee	0	4	1	5	2,966	808	3,774	840	561	1,401	44	23	67	25,155	31,476	56,631	61,878
Texas	0	0	0	0	171	14	185	28	0	28	384	2,698	3,082	533	129	662	3,957
Washington	0	69	84	153	2,420	830	3,250	496	46	542	329	168	497	6,824	0	6,824	11,266
Wyoming	0	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	9
TOTALS	2,496	336	156	492	21,281	92,968	114,249	1,868	5,563	7,431	5,452	25,832	31,284	92,544	103,387	195,931	351,883

* 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 1995 DOE Recycling Activities by State
(in Metric Tons[a])

State	Paper Products	Metals	Automotive	Other[b]	[Other Explanation]	*TOTAL[a]*
California	737	3,599	107	5,611	Vegetation waste, concrete, asphalt, wood	*10,054*
Colorado	484	986	23	951	Mineral oil, asphalt, solvent, antifreeze	*2,444*
Florida	55	180	0	2		*237*
Idaho	341	159	192	6	Solvent, ethylene glycol	*698*
Illinois	263	2,115	22	1,547	Concrete, steel, dynatron tubes	*3,947*
Kentucky	7	0	0	0		*7*
Missouri	231	674	23	3,088	Asphalt, copper, organic material, computers, lumber, copper etchant	*4,016*
Montana	0	0	0	0		*0*
Nevada	319	4,229	575	1		*5,124*
New Jersey	105	108	5	184	Computer scrap, scrap metals, mercury, concrete	*402*
New Mexico	880	1,661	204	7,739	Antifreeze, solvent, titanium, fluorescent light tubes, pallets, construction material	*10,484*
New York	517	235	25	587	Wood, concrete, tungsten, oil, pallets, zinc bromide	*1,364*
Ohio	1,000	168	11	28	Fluorescent light bulbs	*1,207*
Oregon	1,605	1,698	184	12,979	Antifreeze, mercury, oil, electrical equipment, miscellaneous metals, tools	*16,466*
Pennsylvania	24	29	2	2		*57*
South Carolina	915	2,073	60	34	Antifreeze, solvents, silver, drums, furniture	*3,082*
Tennessee	1,043	94	20	14,742	Concrete, uranium, coal ash, automotive antifreeze	*15,899*
Texas	146	221	29	2,263	Antifreeze, asphalt, electrical components, freon, solvents	*2,659*
Washington	682	3,846	126	456	Software, chemical aerosols, fluorescent light tubes	*5,110*
TOTAL	*9,354*	*22,075*	*1,608*	*50,220*		*83,257*

[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.*

Chapter 6.0

SITE-SPECIFIC ACCOMPLISHMENTS

This Chapter presents fact sheets on each of the 40 DOE reporting sites, in alphabetical order by site name. **Please note that these pages are not included in this Report's pagination, in order to facilitate use as handouts.** Information provided includes the site mission, site description, types and amounts of routine operations waste generated from 1993 through 1995, an estimate of 1999 waste generation, and pollution prevention highlights and accomplishments.

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
Naval Petroleum Reserve No. 1
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
Waste Isolation Pilot Plant
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

Argonne National Laboratory–East

Argonne National Laboratory–East – 1995

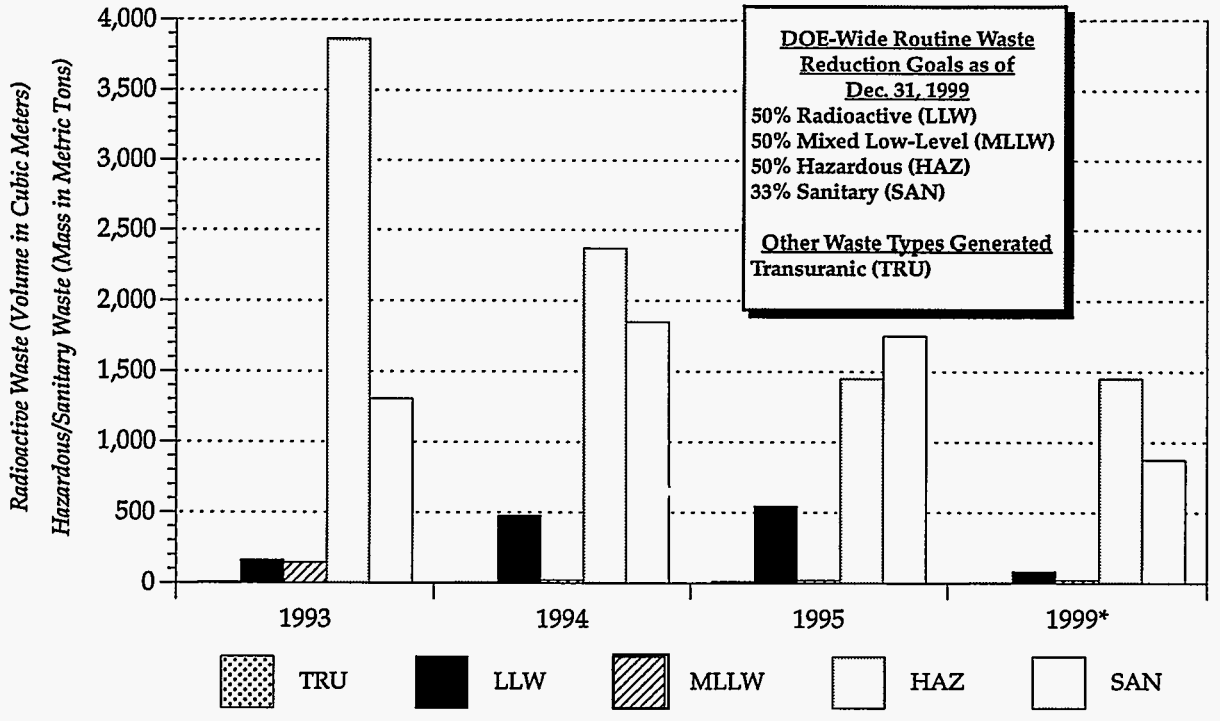
Location:	**Argonne, Illinois**
Site Size:	**1,700 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**424**
Prime Contractor Employees:	**3,316**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Experimental Boiling Water Reactor containment structure will be converted to a transuranic storage facility by EM-30. This will save DOE approximately $2,000,000.
- Lime sludge is being recycled for use on farm fields. This will save $350,000, and benefits Illinois farmers.
- Decontaminated 36 of 76 rod storage holes at Chicago Pile-Five to free-release levels, eliminating the need to remove the storage tubes by coring them out. This saved approximately $300,000.
- Contaminated rubble and debris have been used as void-space filler, saving $100,000.
- Reused three of 61 plutonium gloveboxes onsite versus shipping them for disposal after size reduction. This saved approximately $15,000.
- The retread tire program reuses retread tires on medium and heavy duty vehicles, which saves approximately $60 per tire.
- More than 31,000 metric tons of scrap metal from Chicago Pile-Five was recycled for use as shielding materials and radioactive waste containers.
- More than 1,000 cubic meters of activated shield block were recycled.

Materials Recycled by the Argonne National Laboratory–East in 1995

Recycled Material	Argonne National Laboratory–East *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	not tracked	1,608
Metals	414	22,075
Paper	185	9,354
Other Materials*	174	50,220
GRAND TOTAL	*773*	*83,257*

* *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.*

- Chicago Pile-Five recycled 31 metric tons of contaminated steel for reuse as disposal containers and shielding.
- Acquisition of a recovery and recycling unit for vehicle antifreeze resulted in the reuse of 90 percent of the antifreeze in the Argonne National Laboratory–East vehicle fleet.
- Usage of Freon for air conditioning was reduced 75 percent by recovery and recycling.
- The Oil-Water Separator began operation in 1995, and has successfully reduced the oil-water wastestream.
- Scrap metals are recycled as mixed metals, and include stainless steel, copper, iron, aluminum, lead, and zinc.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Argonne National Laboratory–East may be obtained by contacting:

Noreen Brachmann
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2342, FAX 630-252-2654

James R. Thuot
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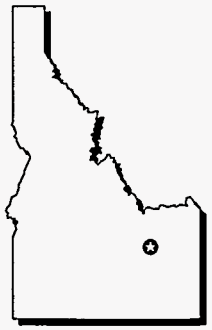
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Argonne National Laboratory–West



Argonne National Laboratory–West – 1995

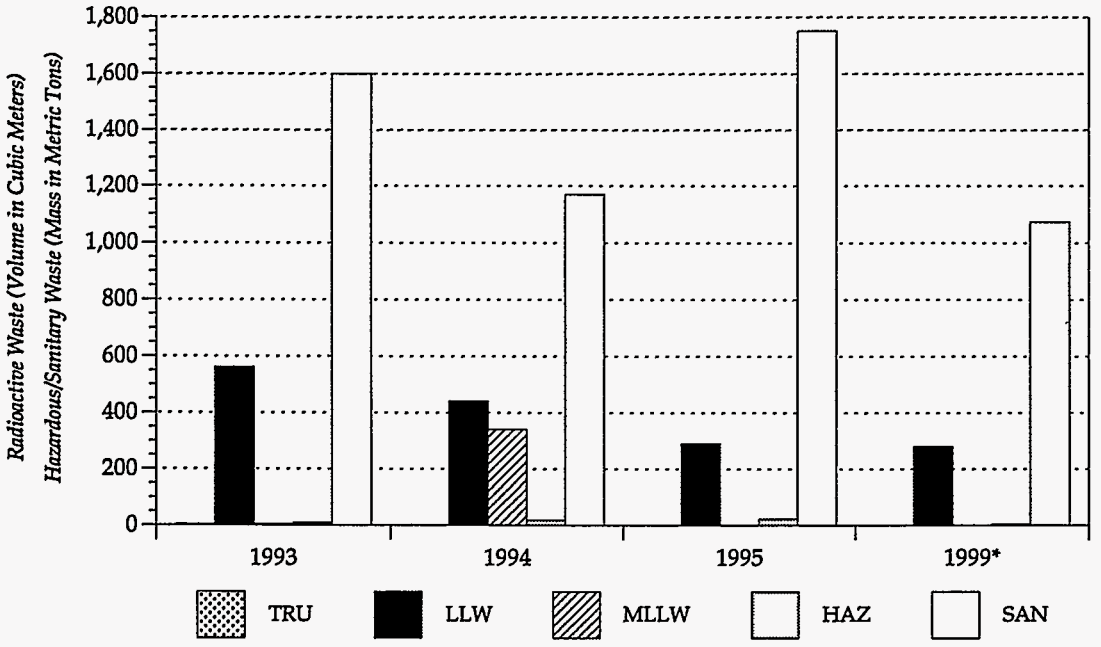
Location:	**Idaho Falls, Idaho**
Site Size:	**824 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Nuclear Energy**
DOE Employees:	**6**
Prime Contractor Employees:	**849**

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 were 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)

1995 Pollution Prevention Activities and Accomplishments

- Approximately 9.63 metric tons of stored used lead was melted and fabricated into shield plugs.
- The Argonne National Laboratory–West participates in the Idaho National Engineering Laboratory's Material Exchange Program. This program identifies users of hazardous and industrial materials, enabling reuse of materials that would otherwise be disposed as waste.
- Personnel attend pollution prevention conferences and workshops for instruction and guidance in waste reduction concepts and methods.
- The Argonne National Laboratory–West participates in the Idaho National Engineering Laboratory Waste Minimization Program by preparing a Waste Minimization Plan for use as an attachment to the DOE-Idaho Waste Minimization and Pollution Prevention Plan.
- Part of the Argonne National Laboratory–West Waste Minimization Plan includes a wastestream-specific evaluation of techniques used to minimize waste generation. These evaluations have resulted in the implementation of waste minimization through segregation, solvent substitution, and identification of recycling opportunities. These activities take place with the end result in mind and at low cost, so formal evaluations detailed in Pollution Prevention Opportunity Assessments or Return on Investments are not warranted. Examples of successful evaluations include: replacement of epoxy paint on shipping casks with latex paint to prevent generation of hazardous and/or mixed waste due to cask weld inspections, use of radioactive low-level organic wastes as activators for solidification mixtures, and reuse of laboratory cleaning solutions for industrial cleaning or degreasing.

Materials Recycled by the Argonne National Laboratory–West in 1995

Recycled Material	Argonne National Laboratory–West *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	2	1,608
Metals	11	22,075
Paper	0	9,354
Other Materials*	3	50,220
GRAND TOTAL	*16*	*83,257*

* *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.*

- Materials recycled include scrap metals (copper, aluminum, stainless and carbon steel), wood, Safety Kleen solvent, ethylene glycol, waste oil, circuit boards, photographic waste and film scraps, lead, mercury, and batteries.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Argonne National Laboratory–West may be obtained by contacting:

Noreen Brachmann
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Battelle Columbus Laboratories

Battelle Columbus Laboratories – 1995

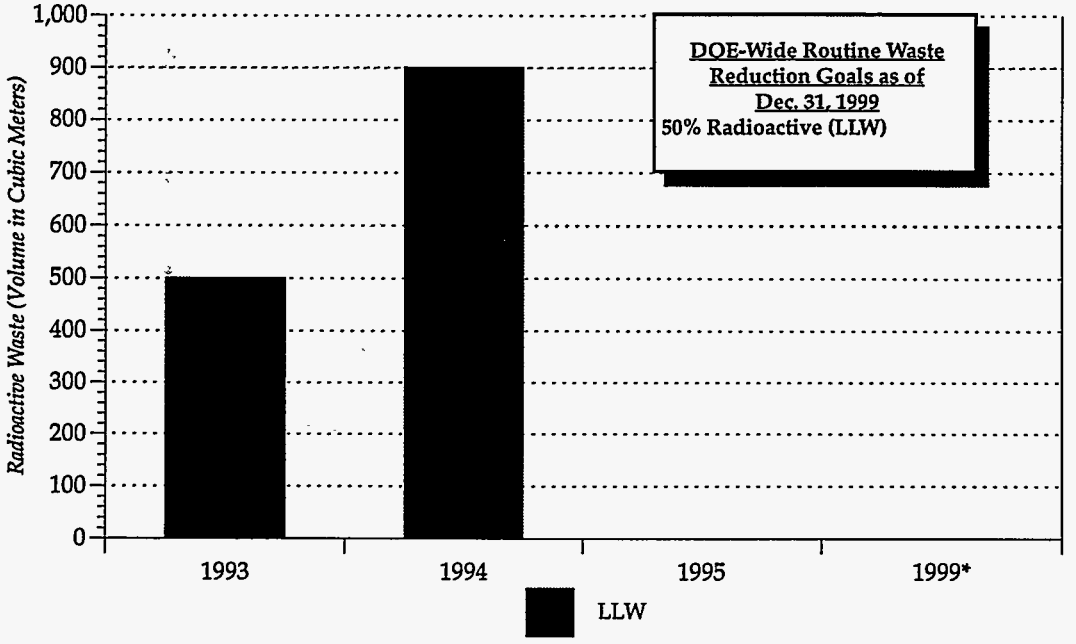
Location:	**Columbus, Ohio**
Site Size:	**1,242 Acres**
Operations Office:	**Ohio**
Lead Program Office:	**Environmental Management**
DOE Employees:	**5**
Prime Contractor Employees:	**71**

Facility Mission

The Battelle Columbus Laboratories are being decommissioned by 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 facilities 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.*

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

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- During calendar year 1995, the Battelle Columbus Laboratories shipped approximately 20,480 cubic feet of ferrous metals for reuse as shielding and shipping containers.
- The Battelle Columbus Laboratories has reduced or eliminated the generation of radioactive mixed waste through product substitution and sorting and segregation of low-level waste at the point of generation.
- The Battelle Columbus Laboratories Waste Management and Building Management divisions operate a radiological free-release program to minimize the volume of low-level radioactive waste generated. Quantitative data on the total volume of waste released under this program is not collected.
- Radioactively contaminated ductile iron drainlines were removed during building decommissioning. The pipe joints were impacted, the lead was removed intact, and was radiologically free-released for recycling by Battelle Columbus Laboratories.
- Reuse of Battelle Columbus Laboratories material and equipment is accomplished by making it available through the radiological free-release program. Recycling is accomplished by metal melting at Scientific Ecology Group.

Materials Recycled by the Battelle Columbus Laboratories in 1995

Recycled Material	Battelle Columbus Laboratories *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	53	22,075
Paper	not tracked	9,354
Other Materials*	0	50,220
GRAND TOTAL	*53*	*83,257*

* *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.*

- Battelle Columbus Laboratories personnel participate in an office paper, newspaper, and phone book recycling program; aluminum beverage cans are informally recycled on a voluntary basis.
- The Battelle Columbus Laboratories implements waste management policy through a standardized system of procedure writing, indoctrination, and qualification.
- The Battelle Columbus Laboratories does not provide an incentive program, nor is it funded for Pollution Prevention Opportunity programs. Employee awareness is enhanced by staff meetings designed to promote information exchange.
- Planning for waste management is accomplished through budgetary priorities, procedure development,

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Battelle Columbus Laboratories 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

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

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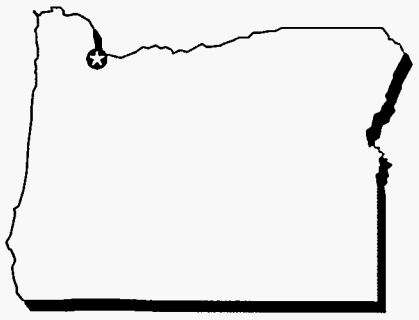
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Bonneville Power Administration



Bonneville Power Administration – 1995

Location:	**Portland, Oregon**
Site Size:	**300,000 sq. miles**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Power Marketing Administration**
DOE Employees:	**3,271**
Prime Contractor Employees:	**0**

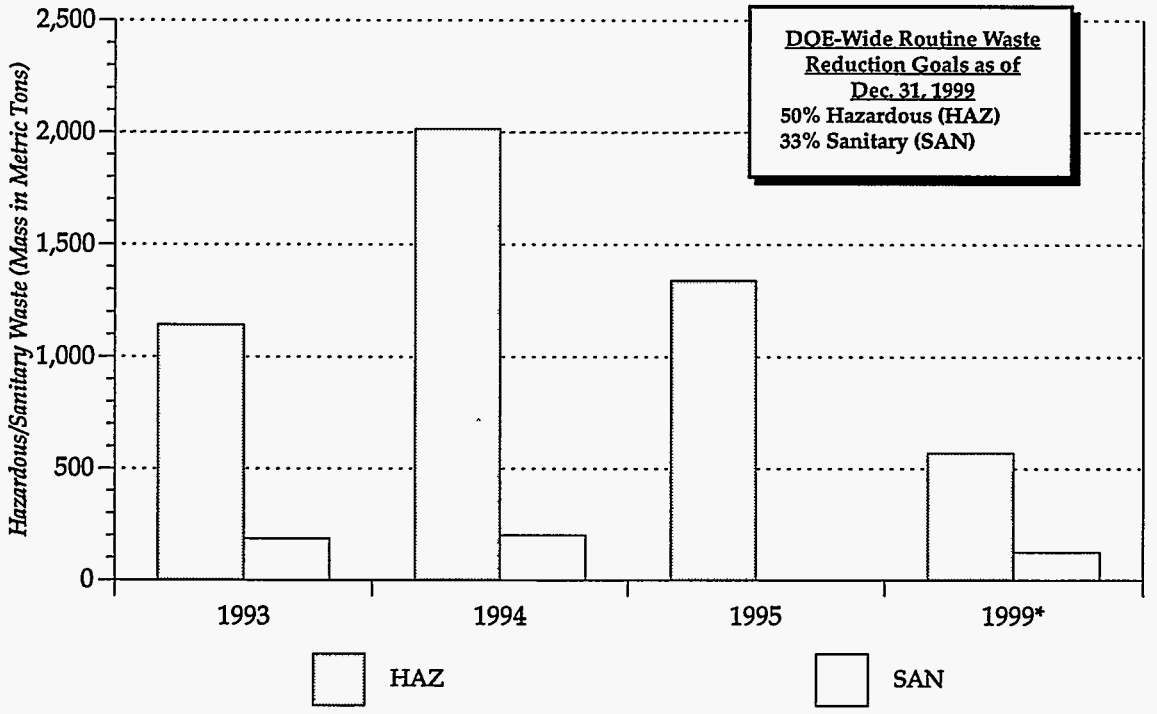
Facility Mission

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

The Bonneville Power Administration annually markets and transmits 134,237 megawatts of power from one non-federal nuclear power generating facility, certain thermal resources, and 30 federally operated hydroelectric facilities, to over 170 customers, including public and private utilities, and direct service industries. The utilities then provide retail electric service to Pacific Northwest consumers. The Bonneville Power Administration supplies approximately 50 percent of all power used in the Pacific Northwest, and 75 percent of the transmission capacity.

(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)

1995 Pollution Prevention Activities and Accomplishments

- In 1995, the waste minimization and pollution prevention activities focused on the elimination of potential contaminants from work activities and facilities, and improved management of materials.
- The Bonneville Power Administration's primary source reduction activity is the replacement of polychlorinated biphenyl-containing equipment (especially capacitors) with non-polychlorinated biphenyl-containing equipment at all facilities. In 1995, 7,172 polychlorinated biphenyl-containing capacitors were replaced by non-polychlorinated biphenyl-containing capacitors. Approximately 60,359 remaining polychlorinated biphenyl capacitors are scheduled to be replaced by the year 2007.
- Secondary containment was installed around large oil-filled equipment at several facilities to reduce or eliminate the impact to ground and surface water should an oil spill occur due to equipment failure.
- The revenues generated by the sale of power and transmission services are used to recover the cost of operating the system, repay the Federal investment in the system, finance new power generation and transmission facilities, and enhance fish, wildlife, and other conservation measures.

Materials Recycled by the Bonneville Power Administration in 1995

Recycled Material	Bonneville Power Administration *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	184	1,608
Metals	1,698	22,075
Paper	1,605	9,354
Other Materials*	12,979	50,220
GRAND TOTAL	*16,466*	*83,257*

* *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.*

- Efforts to formalize an agency-wide waste minimization and pollution prevention program in 1995-6 will enable the Bonneville Power Administration to realize additional waste minimization and pollution prevention accomplishments, reduce operating costs and liabilities, and contribute to competitiveness in the utility market.
- The Bonneville Power Administration's operational activities are typical of most facilities in the electrical utility industry, but are different in comparison to other DOE facilities. Waste generating activities include those processes and procedures that are necessary to maintain the reliable operation of a large electrical power marketing and transmission system.
- Wastestream specific reduction targets were identified for several primary waste generating activities and progress was made toward their reduction.

This fact sheet contains information provided by the site. 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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Brookhaven National Laboratory

Brookhaven National Laboratory – 1995

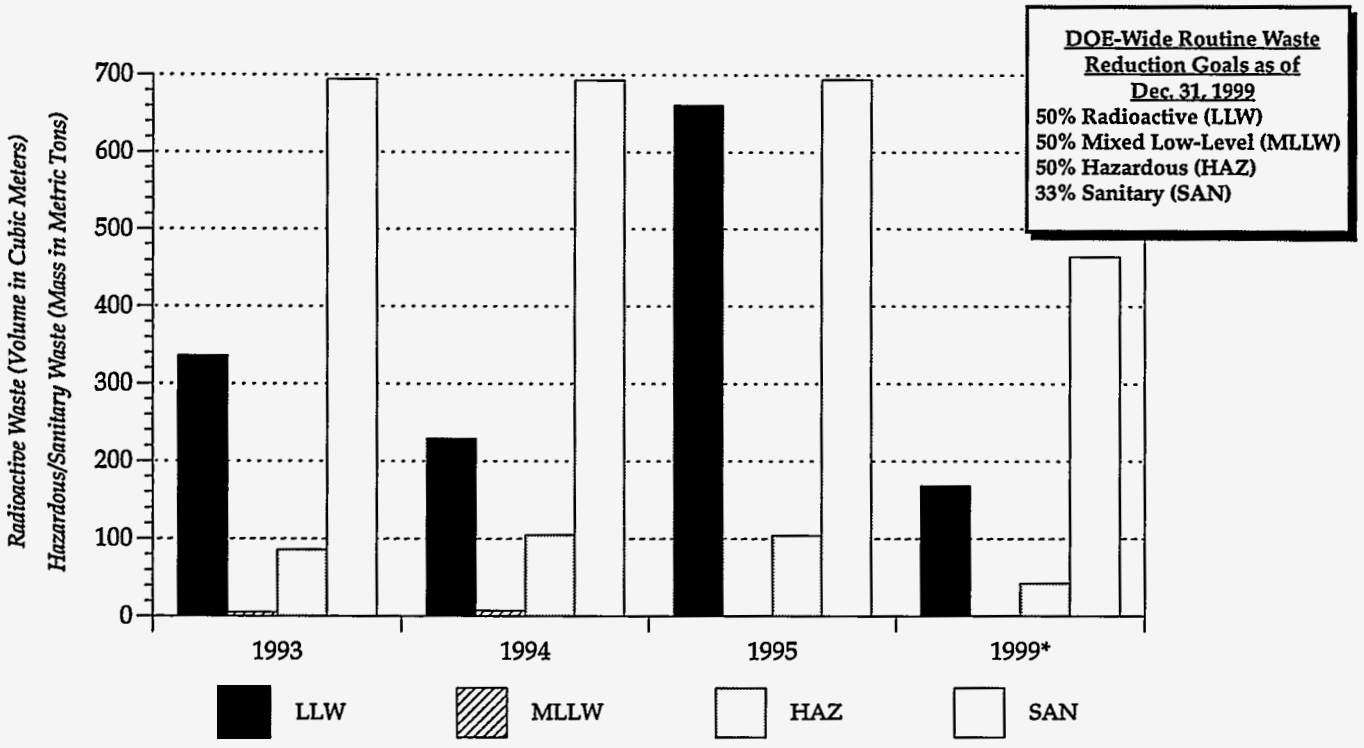
Location:	**Upton, New York**
Site Size:	**5,300 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**35**
Prime Contractor Employees:	**3,142**

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)

1995 Pollution Prevention Activities and Accomplishments

- The transfer of more than 15,000 tons of shielding block from the Bevelac Accelerator at the Lawrence Berkeley National Laboratory to the RHIC Facility at the Brookhaven National Laboratory resulted in an avoided disposal cost of approximately $40 million.
- Generation of waste 1,1,1 trichloroethane was reduced to less than 300 pounds in 1995 through material substitutions and improved handling, a reduction of more than 85 percent compared to 1992.
- An assessment of the water cooled systems within AGS was performed to reduce waste generation. The assessment focused on the modification of processes rather than on the treatment of wastewater. The assessment conclusion recommended that spent resin be replaced by new resin, which would eliminate the generation of approximately 15,000 gallons of low-level radioactive wastewater annually.
- The Solid Waste Recycling Program managed by the Brookhaven National Laboratory's Plant Engineering Division began recycling soil and asphalt in 1995, instead of sending it to the landfill.

Materials Recycled by the Brookhaven National Laboratory in 1995

Recycled Material	Brookhaven National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	23	1,608
Metals	149	22,075
Paper	275	9,354
Other Materials*	578	50,220
GRAND TOTAL	*1,025*	*83,257*

* *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.*

- A high degree of cleanliness is required for the ultra-high vacuum components utilized at the Brookhaven National Laboratory's National Synchrotron Light Source. To provide a safer work environment and reduce hazardous waste generation, a contract was awarded to develop a safer cleaning alternative. Cleaning was previously achieved through the use of hydrofluoric and nitric acids to etch the metal components to remove surface contaminants that might affect the performance of the high vacuum systems.
- The success of the Brookhaven National Laboratory's waste minimization program is attributed to several factors. The development of aggressive training, incentive, and awareness programs has resulted in an increase in employee awareness and concern for the environment. Many of the waste minimization accomplishments are the result of individuals seeking a better and safer way of doing business.
- There are many other successes at the Brookhaven National Laboratory, and whether they impact just one individual or the entire site, these successes reflect the Laboratory's commitment to waste minimization.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Brookhaven National Laboratory may be obtained by contacting:

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Waste Generation and Pollution Prevention Progress Fact Sheet

Energy Technology Engineering Center

Energy Technology Engineering Center – 1995

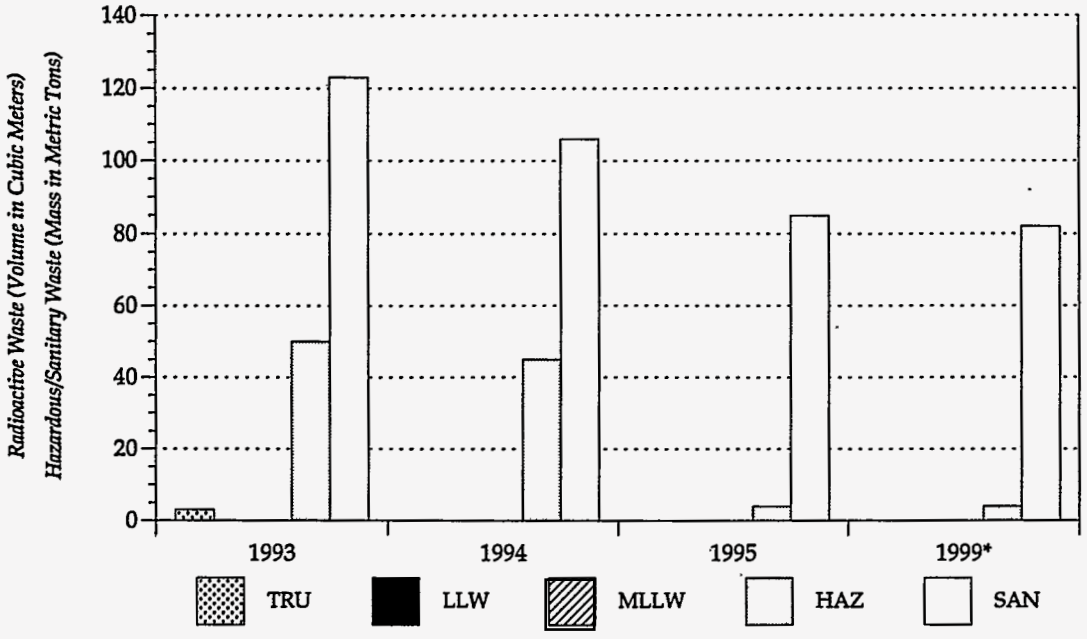
Location:	**Canoga Park, California**
Site Size:	**94 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Environmental Management**
DOE Employees:	**3**
Prime Contractor Employees:	**120**

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



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)

1995 Pollution Prevention Activities and Accomplishments

- The Energy Technology Engineering Center decontaminated and recycled approximately 200,000 pounds of radioactively-contaminated lead from the Radioactive Materials Handling Facility.
- The Energy Technology Engineering Center decontaminated and recycled approximately 40,000 pounds of lead and steel from the Moderator Cask.
- The Radioactive Materials Handling Facility was identified as a suitable area for the use of self-cleaning cartridge prefilters for reduction of low-level radioactive decontamination and decommissioning waste.
- The recommendation to use spray nozzles for rinsing operations for the HWMF was implemented, resulting in reduced water usage and reduced waste generation.
- Procurement of a Grit Blaster, Waste Compactor, and Torit Filter was initiated for the Radioactive Materials Handling Facility. These items are expected to significantly reduce operations waste.
- Chemical tracking and MSDS systems are in place and linked to the purchasing department and point of generation.

Materials Recycled by the Energy Technology Engineering Center in 1995

Recycled Material	Energy Technology Engineering Center *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	<0.5	1,608
Metals	31	22,075
Paper	5	9,354
Other Materials*	0	50,220
GRAND TOTAL	*36*	*83,257*

* *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.*

- Since January 1991, sodium hydroxide (the greatest wastestream generated) has been used onsite (when practical) for pH neutralization of acids at the metal treatment facility.
- Oily wastewaters (e.g., from air compressor blowdown), are recycled offsite.
- When possible, waste containers are reused onsite by combining hazardous wastes during pickup runs.
- Nonradioactive metals which pass the radiation survey are reused onsite and offsite.
- Oils from large turbines and motors are sampled and analyzed before replacement, which extends the life of expensive synthetic oils.
- Materials recycled include white paper, colored paper, and aluminum cans.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Energy Technology Engineering Center may be obtained by contacting:

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Oakland, CA 94612-5208
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Ravnesh Amar
Rocketdyne Division, Rockwell
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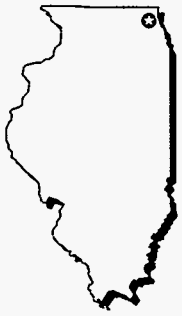
Waste Generation and Pollution Prevention Progress Fact Sheet

Fermi National Accelerator Laboratory



Fermi National Accelerator Laboratory – 1995

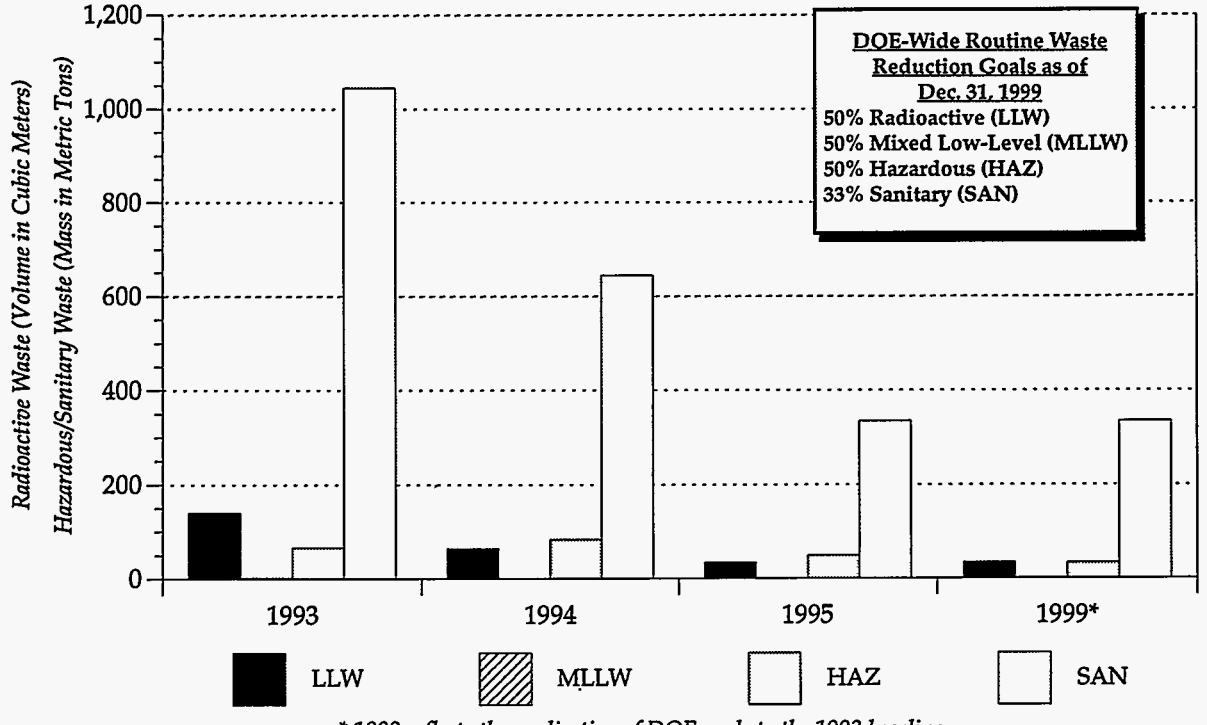
Location:	**Batavia, Illinois**
Site Size:	**6,800 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**16**
Prime Contractor Employees:	**2,100**

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)

1995 Pollution Prevention Activities and Accomplishments

- Excess Nevis concrete shielding blocks were reused in a new experiment, rather than disposing of them or buying new ones. This reduced waste generation by 51,366 metric tons, and saved $470,580.
- Contaminated and corroded lead shielding was cleaned for reuse. This reduced waste generation by 53 metric tons, and saved $17,700.
- A marked reduction in ozone-depleting chlorofluorocarbon emissions was achieved in calendar year 1995.
- Halon fire extinguishers were placed on a manual setting so that Halon would not automatically be released.
- Equipment was obtained and personnel were trained to recover Freon from chillers, air conditioners, and refrigerators, which reduced the emission of Freon 11 from the CUB. One of the chillers had its refrigerant replaced by a non-chlorofluorocarbon refrigerant.
- The use of Freon 113 for cleaning has essentially been eliminated.

Materials Recycled by the Fermi National Accelerator Laboratory in 1995

Recycled Material	Fermi National Accelerator Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	22	1,608
Metals	1,701	22,075
Paper	78	9,354
Other Materials*	1,370	50,220
GRAND TOTAL	*3,171*	*83,257*

* *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 Minimization Subcommittee was fully operational in 1995, and provided recommendations to Divisions/Sections on waste minimization/pollution prevention issues, policy, procedures, and implementation.
- Waste minimization/pollution prevention awareness training was provided to site employees through waste management, personnel interaction, and articles in *Ferminews*. A Fermilab-produced video and a DOE waste minimization/pollution prevention video were shown to Fermilab employees, and several waste minimization/pollution prevention awareness articles were published in *Ferminews*.
- Several Divisions developed Chemical Management Systems to allow the sharing of unneeded but useful chemicals. A lab-wide system is being developed using Environmental Management funds.
- Fermilab increased its recycling by sending paper, cardboard, and plastic to be recycled, instead of disposing it as sanitary waste.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Fermi National Accelerator Laboratory may be obtained by contacting:

Noreen Brachmann
U.S. Department of Energy Operations Office, Chicago
9800 South Cass Ave., Bldg. 201
Argonne, IL 60439
630-252-2342, FAX 630-252-2654

Kenneth E. Isakson
Fermi National Accelerator Laboratory
P.O. Box 500
Batavia, IL 60510
630-840-8203, FAX 630-840-3390

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Waste Generation and Pollution Prevention Progress Fact Sheet

Fernald Environmental Management Project

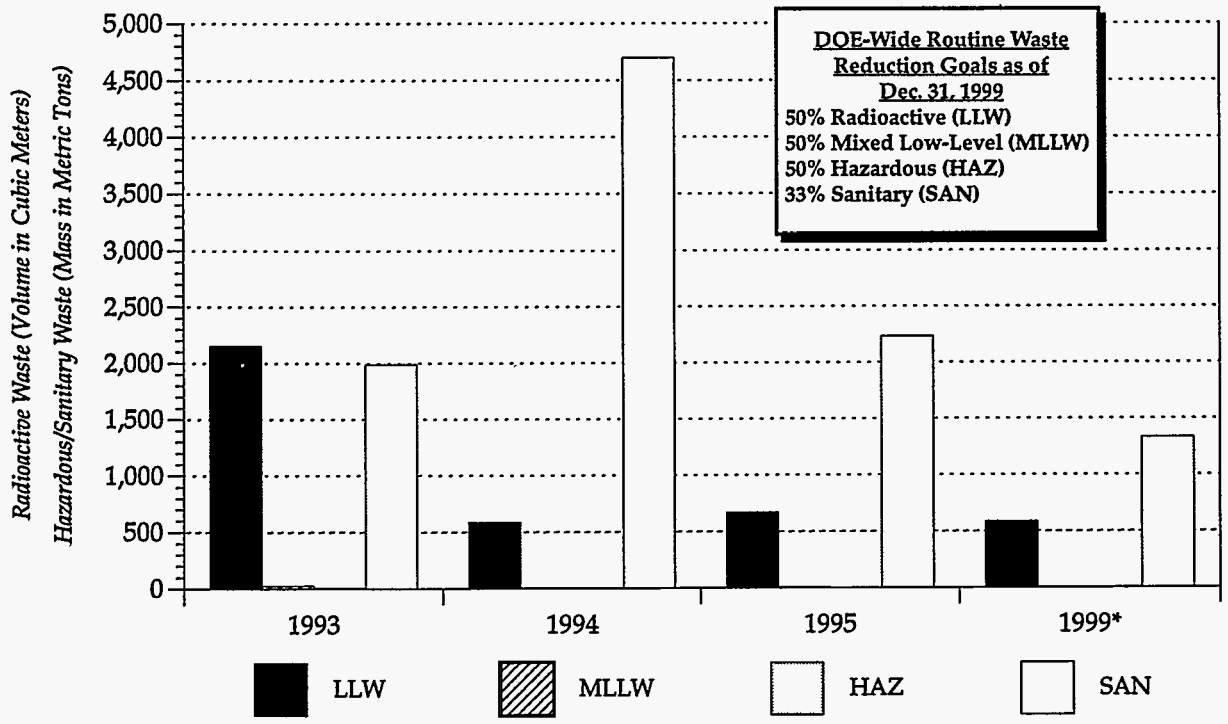
Fernald Environmental Management Project – 1995	
Location:	**Fernald, Ohio**
Site Size:	**1,050 Acres**
Operations Office:	**Ohio**
Lead Program Office:	**Environmental Management**
DOE Employees:	**54**
Prime Contractor Employees:	**1,949**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Clean Area Trash Segregation Program successfully continued to divert office, breakroom, and restroom trash generated by the former production area at the Fernald Environmental Management Project. In calendar year 1995, 30,000 cubic feet (849 cubic meters) of waste was diverted, at a cost savings of more than $162,000. Total savings since the program's inception have surpassed $265,000.
- The Fernald Environmental Management Project's Reuse Bulletin Board, an electronic "swap shop," has increased the efficiency of work due to easier supply access, has saved valuable resources from being wasted, and has diverted reusables from the sanitary landfill. This saved more than $100,000.
- The Receiving and Incoming Material Inspection Area (RIMIA) Solid Waste Reduction Program diverted 3,313 cubic feet of packaging material for recycling or disposal as sanitary waste, avoiding classification and disposal as low-level waste. This has saved more than $20,000.

Materials Recycled by the Fernald Environmental Management Project in 1995

Recycled Material	Fernald Environmental Management Project *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	7	1,608
Metals	95	22,075
Paper	900	9,354
Other Materials*	2	50,220
GRAND TOTAL	*1,004*	*83,257*

* *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.*

- Recovered or recycled 76.7 tons of Freon from drinking fountains and air conditioning units.
- Recycled 508 kilograms of fluorescent light tubes and ballasts, avoiding disposal as hazardous materials.
- An accelerated cleanup plan was approved to enable site remediation activities to be completed in approximately 10 years, with aquifer restoration activities extending an additional five years.
- One of the Return-On-Investment proposals submitted to DOE was accepted for funding. The Stormwater Run-off Diversion project will potentially divert more than 48,000 cubic meters of water from the Advanced Wastewater Treatment facility, which will cut processing costs and extend the useful life of the facility.
- Incentive programs continued to be utilized in 1995 to award employees for waste minimization/pollution prevention suggestions that were implemented. Ongoing recognition of employees who assist the site in achieving its waste minimization/pollution prevention goals has been one of the most positive aspects of the site's waste minimization/pollution prevention program. Efforts to expand this type of incentive will continue in 1996.

This fact sheet contains information provided by the site. 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

Alisa Rhodes
Fernald Environmental Management Project
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513-648-4968, FAX 513-648-5701

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Formerly Utilized Sites Remedial Action Program

Formerly Utilized Sites Remedial Action Program – 1995

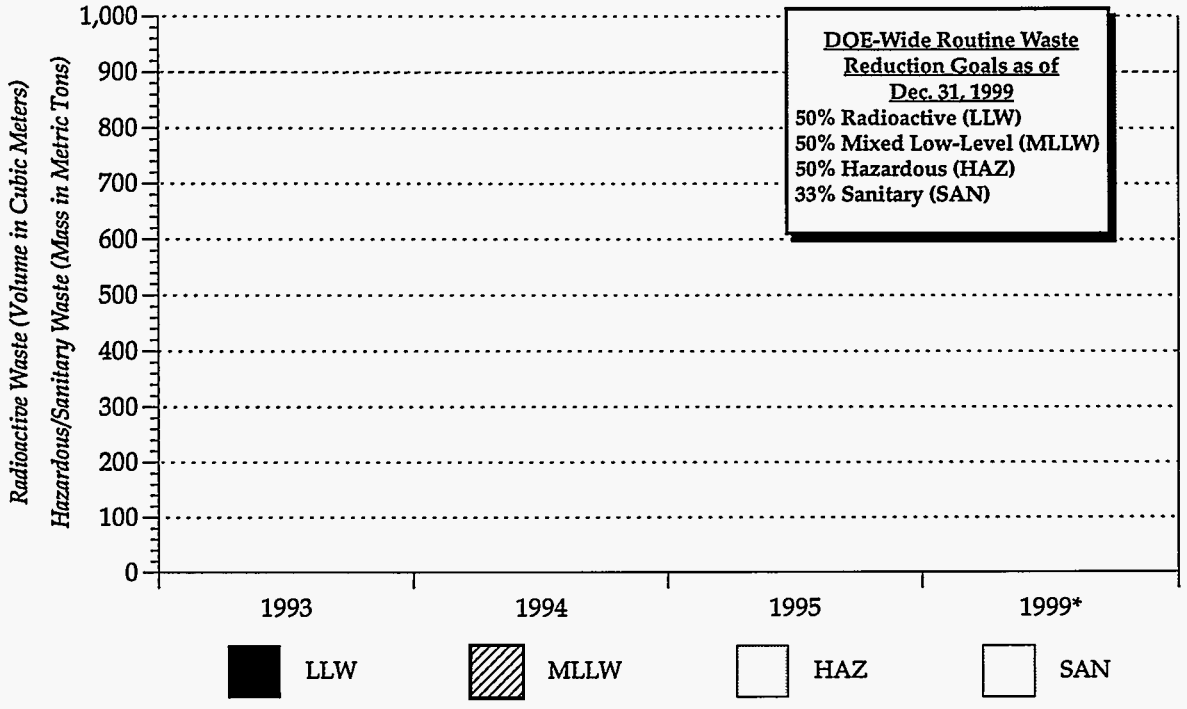
Location:	**Oak Ridge, Tennessee**
Site Size:	**n/a**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**14**
Prime Contractor Employees:	**288**

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 1995 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)

1995 Pollution Prevention Activities and Accomplishments

- An innovative approach to design and remedial action was implemented at the Chapman Valve Site. The site was designated for cleanup of low levels of residual uranium resulting from machining operations conducted in support of the Nation's early atomic research program. By combining the innovative dose-base remediation approach, which included the use of supplemental limits/hazard assessment and various waste volume reduction techniques, the final project costs were reduced from the original estimate of $4.3 million to $2 million, a savings of $2.3 million. Waste volumes were reduced from the original estimate of 9,000 cubic feet to 460 cubic feet, a reduction of approximately 95 percent.

Materials Recycled by the Formerly Utilized Sites Remedial Action Program in 1995

Recycled Material	Formerly Utilized Sites Remedial Action Program *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	0	22,075
Paper	20	9,354
Other Materials*	8,003	50,220
GRAND TOTAL	*8,023*	*83,257*

* *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.*

- An innovative technique was used to perform in situ post-remedial surveys of the General Motors underground pipes and drain lines. By combining up-front integrated planning, a risk based hazard assessment, waste minimization, and implementation of the "Pipe Explorer" detector, more than $1.6 million was saved versus traditional remediation methods. The Pipe Explorer, a pneumatically deployed detector protected by a thin plastic membrane, consists of a flexible, impermeable, tubular membrane material coiled inside of an airtight canister. This detector reduces the volume of radioactively contaminated investigation derived waste, reduces worker exposure to decontamination procedures, and reduces the probability of detector damage.
- A rock crusher was used to crush 8,000 metric tons of concrete and building rubble that was subsequently sampled and placed onsite as clean backfill.
- Three metric tons of depleted uranium were recycled for reuse.
- Radioactively contaminated personal protective clothing was incinerated to reduce volume for disposal.
- A metal shredder and compactor were used at the Colonie Interim Storage Site.
- Volume reduction techniques implemented at the Chapman Valve Site included segregation, sampling, and surveying.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Formerly Utilized Sites Remedial Action Program may be obtained by contacting:

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EW-921, P.O. Box 2001
Oak Ridge, TN 37830
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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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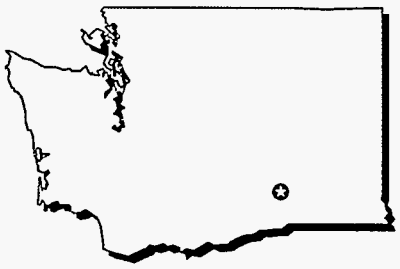
Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Hanford Site



Hanford Site – 1995

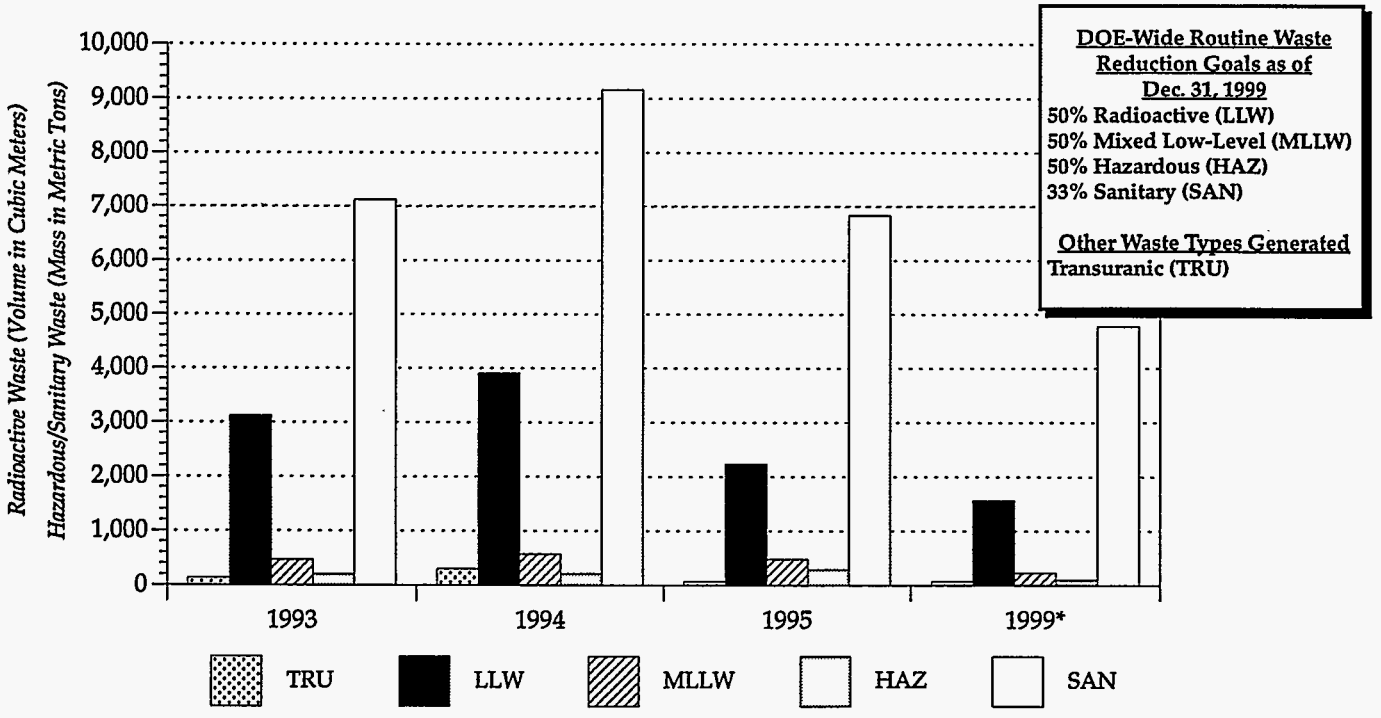
Location:	**Richland, Washington**
Site Size:	**358,400 Acres**
Operations Office:	**Richland**
Lead Program Office:	**Environmental Management**
DOE Employees:	**555**
Prime Contractor Employees:	**9,200**

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)

1995 Pollution Prevention Activities and Accomplishments

- As the PUREX Facility flushes chemical tanks for deactivation, the rinsate is reused to flush other tanks, decreasing the amount of radioactive water sent to the Tank Farms for storage and treatment by approximately 100,000 gallons in calendar year 1995.
- As a result of deactivation activities, the PUREX Analytical Laboratory redeployed approximately 3,000 cubic feet of unneeded laboratory equipment and supplies to other Hanford laboratories.
- Due to Hanford's downsizing, approximately 1,200 excess computers were donated to schools.
- In calendar year 1995, 249.48 metric tons of concrete were crushed and recycled.
- Asbestos fibers were converted into a safe, recyclable material by an asbestos conversion system. The system shreds asbestos-containing material and soaks it in a borax and water solution. Then the material is incinerated for one hour in a 1,200-degree Celsius furnace. The result is an asbestos-free recyclable aggregate material that may be reused as backfill and roadbed cover.

Materials Recycled by the Hanford Site in 1995

Recycled Material	Hanford Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	120	1,608
Metals	3,846	22,075
Paper	615	9,354
Other Materials*	438	50,220
GRAND TOTAL	*5,019*	*83,257*

* *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.*

- In 1995, a closed-loop recycling contract for used oil was implemented. This is the first contract of its type implemented at a Department of Energy site.
- Nitric acid containing a small amount of uranium was generated as a byproduct of nuclear fuel dissolution and chemical separation processes at the PUREX Plant. Previously this waste was reused at the PUREX Plant, but in 1995 it was not needed, and was sold to a commercial nuclear fuel reprocessor in Sellafield, England, for reuse.
- Materials recycled include scrap paper, fluorescent lamps, alkaline dry cell batteries, computer diskettes, toner cartridges, carbonless paper, glossy paper, manila file folders, vellum paper, magazines, catalogs, cardboard, and wood.
- Scrap metal items recycled include ferrous and nonferrous steel, copper, brass, lead, scrap furniture, and appliances.
- Decontamination in the 2706 T Facility enabled the recycling and reuse of tank farm auger parts, gas cylinders, trucks, railcars, and cranes.

This fact sheet contains information provided by the site. 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

Mary Betsch
Rust Federal Services Hanford, Inc.
P.O. Box 700, MS H6-06
Richland, WA 99252
509-372-1627, FAX 509-373-0743

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Idaho National Engineering Laboratory

Idaho National Engineering Laboratory – 1995

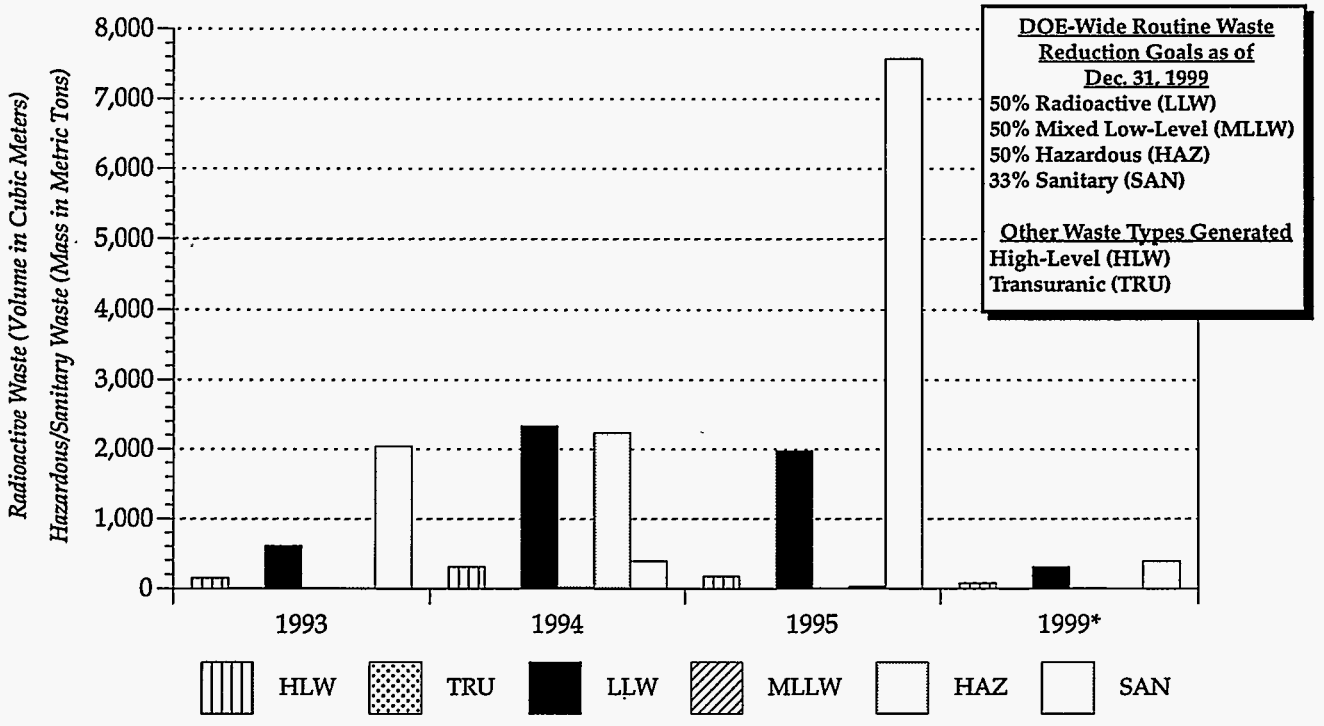
Location:	**Idaho Falls, Idaho**
Site Size:	**569,600 Acres**
Operations Office:	**Idaho**
Lead Program Office:	**Environmental Management**
DOE Employees:	**447**
Prime Contractor Employees:	**5,805**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Idaho National Engineering Laboratory launched an alternate fuel vehicle program. Initially, four buses and 70 vehicles will be converted to compressed natural gas or liquefied natural gas fuel. The current fleet of 150 buses and 700 light-duty vehicles uses a total of 1.6 million gallons of diesel and gasoline fuel each year.
- The Waste Environmental Reduction Facility saved $502,000 by not allowing shipping pallets to be burned with boxed low-level waste. An alternative use for the pallets was identified.
- The Material Exchange Program logged 24 exchanges of 57 chemicals, for a cost savings of approximately $332,000.
- In 1995, a total of 19,725 gallons of used oil was sent offsite for reuse.
- Paper recycling increased from 254.5 metric tons to nearly 310 metric tons in 1995.

Materials Recycled by the Idaho National Engineering Laboratory in 1995

Recycled Material	Idaho National Engineering Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	190	1,608
Metals	148	22,075
Paper	341	9,354
Other Materials*	3	50,220
GRAND TOTAL	*682*	*83,257*

* *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.*

- A total of 6.98 metric tons of Resource Conservation Recovery Act regulated hazardous scrap metal was recycled, consisting of electronic circuit cards and related components, beryllium, cadmium, chromium, lead, and tin.
- A total of 23.14 metric tons of other scrap metals were recycled, including brass, bronze, copper, carbon steel, and aluminum.
- All gold, platinum, and high-purity silver are returned to the DOE Precious Metals Pool. An additional 3.59 metric tons of silver scrap material were sent out for precious metals recovery.
- More than 1,000 outdated (but still useful) video tapes were reused by distributing them to local schools.
- All used nickel cadmium batteries were returned to the manufacturer for recycling, and all mercury-containing items were sent out for mercury recovery.
- The Hazardous Solvent Substitution Data System, developed at the Idaho National Engineering Laboratory, was included in the Environmental Protection Agency's "Enviro$ense P2 Information Network" for Federal agencies.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Idaho National Engineering Laboratory may be obtained by contacting:

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

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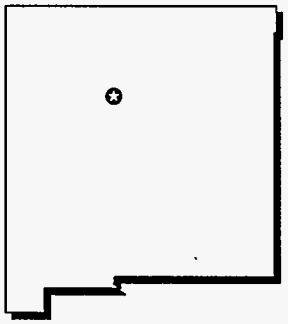
Waste Generation and Pollution Prevention Progress Fact Sheet

Inhalation Toxicology Research Institute



Inhalation Toxicology Research Institute – 1995

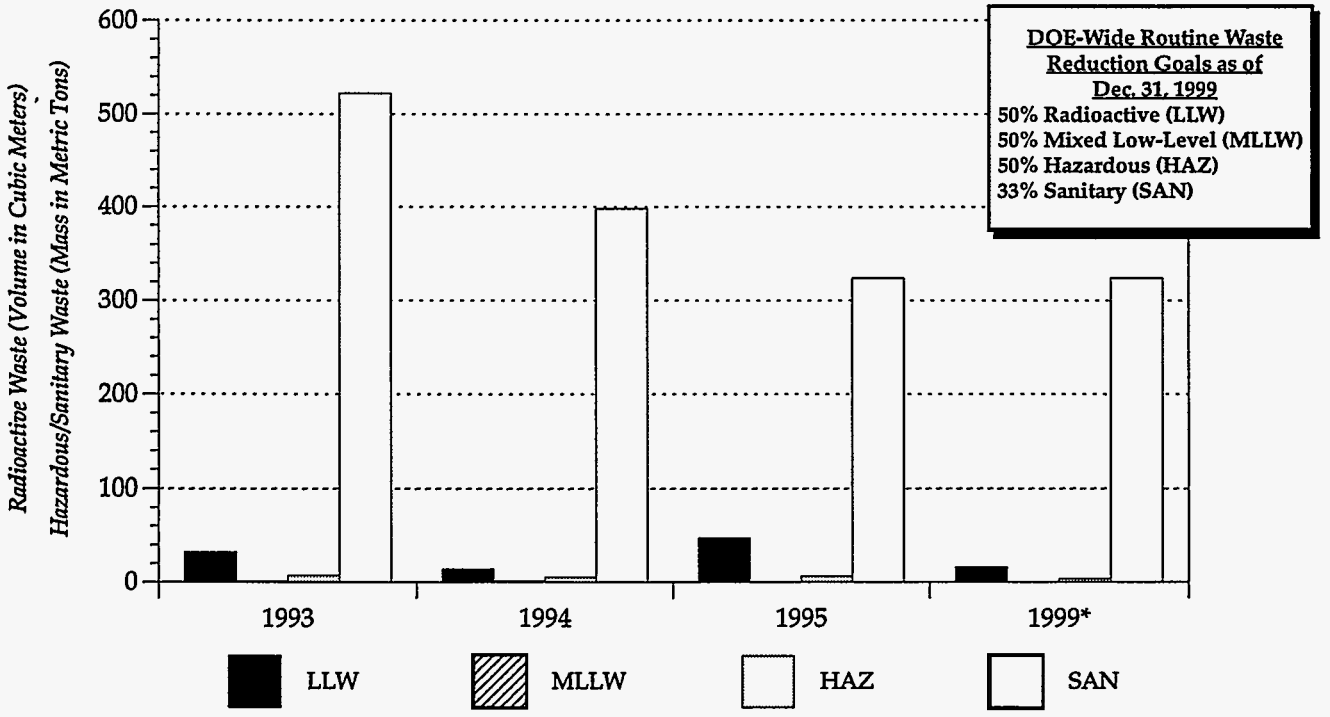
Location:	**Albuquerque, New Mexico**
Site Size:	**135 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Energy Research**
DOE Employees:	**0**
Prime Contractor Employees:	**173**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Inhalation Toxicology Research Institute's waste minimization program was so successful in 1995 that all routine waste minimization goals stated in the 1994 Report were either met or surpassed. The goals for low-level and sanitary waste generation were met. Goals were surpassed for low-level mixed waste (10 percent of the goal), Resource Conservation and Recovery Act regulated hazardous waste (50 percent of the goal), and Toxic Substances Control Act regulated hazardous waste (approximately two percent of the goal).
- The Inhalation Toxicology Research Institute continued the water conservation program begun in 1994, reducing water consumption by 15,000 gallons per day.
- The Inhalation Toxicology Research Institute continued to use its chemical tracking system for quantifying, tracking, and monitoring chemical usage. Before chemicals are purchased, the database of 14,000 chemicals is searched to determine if the particular chemical is in-stock, thus avoiding unnecessary purchases. The system may be expanded to monitor waste in the future.

Materials Recycled by the Inhalation Toxicology Research Institute in 1995

Recycled Material	Inhalation Toxicology Research Institute *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	1	1,608
Metals	<0.5	22,075
Paper	6	9,354
Other Materials*	<0.5	50,220
GRAND TOTAL	*7*	*83,257*

* *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 Inhalation Toxicology Research Institute completed its lead survey, and identified 2,200 lead bricks for certification as non-contaminated. Of these bricks, 1,200 may be recycled and/or reused by other facilities, and the remaining bricks will be retained for future use as shielding.
- The decontamination and recycling of small animal exposure tubes eliminated 0.7 metric tons (65 cubic feet) of low-level radioactive waste.
- Newly hired employees receive waste minimization training as part of the New Employee Training program. Employees who work with radioactive and hazardous waste receive additional instruction, including waste minimization goals, as part of their training.
- The Inhalation Toxicology Research Institute participated in the Affirmative Procurement program by purchasing items with recycled content, when possible, through a General Services Administration contract.

This fact sheet contains information provided by the site. 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
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Albuquerque, NM 87185-5400
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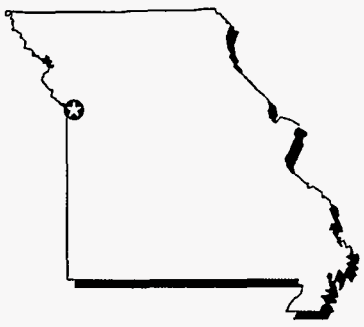
Waste Generation and Pollution Prevention Progress

Fact Sheet

Kansas City Plant



Kansas City Plant – 1995

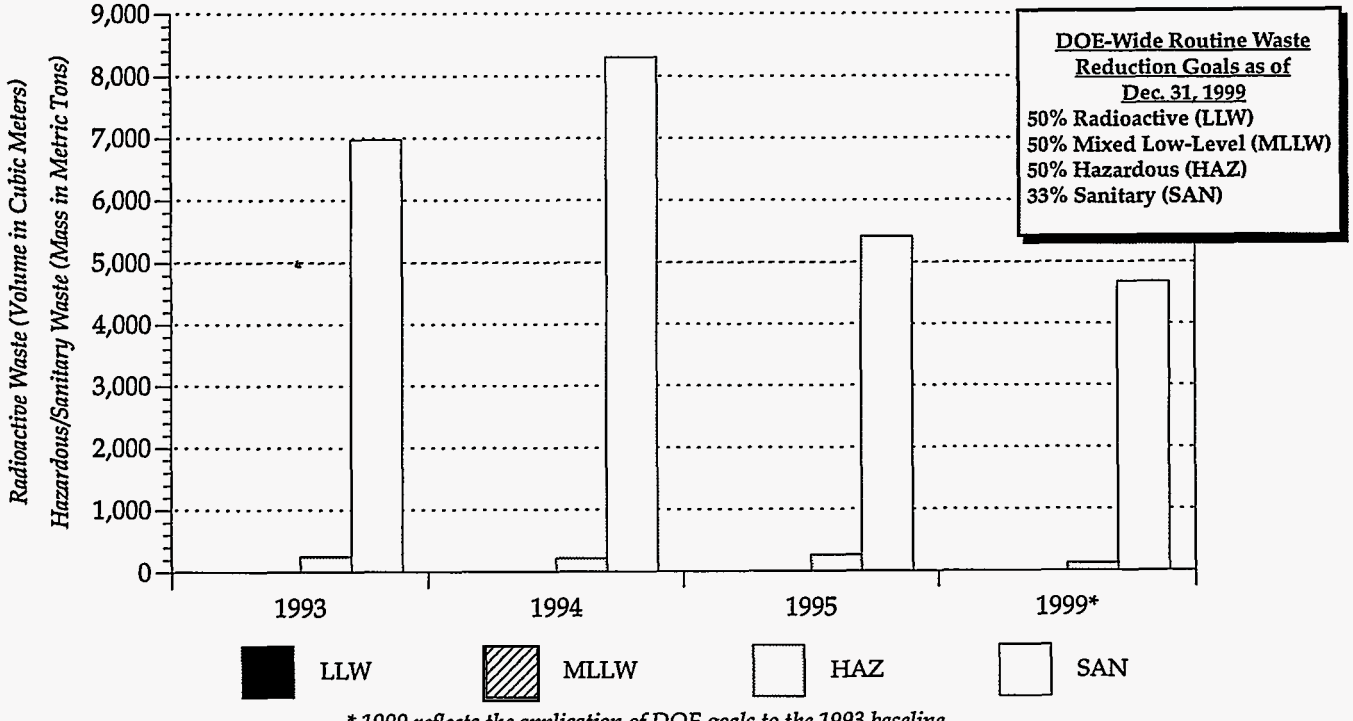
Location:	**Kansas City, Missouri**
Site Size:	**169 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**64**
Prime Contractor Employees:	**3,619**

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)

1995 Pollution Prevention Activities and Accomplishments

- Changes in the routing of chiller system blowdown water and "reject" water from the plant's reverse osmosis/deionized water system have reduced flow to the Plant's Industrial Waste Pretreatment Facility (IWPF) by 74.4 million gallons per year. A change in the operating permit allowed the pH of the IWPF discharge to be increased from 10 to 11, reducing the usage of sulfuric acid by 70,000 pounds per year. Sludge will be reduced by approximately 60,000 pounds per year beginning in 1996, saving $5,700 in annual disposal costs.

Materials Recycled by the Kansas City Plant in 1995

Recycled Material	Kansas City Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	23	1,608
Metals	674	22,075
Paper	222	9,354
Other Materials*	3,088	50,220
GRAND TOTAL	*4,007*	*83,257*

* *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 Kansas City Plant has systematically reduced its usage of EPA 33/50 Program chemicals since the Program's inception in 1988. Reportable usage in 1995 was 8,053 pounds, a 98.5 percent reduction from the 539,593 pounds used in 1988, and groundwork was laid for significant additional reductions in 1996. The Plant also eliminated 1,1,1 trichloroethane from all remaining processes, with the exception of EPA-mandated environmental test methods. The last vapor degreaser using trichloroethylene was removed from operation. Approval was obtained to replace trichloroethylene with a naturally occurring, citrus-based solvent for the cleaning of a major high-voltage electrical assembly.
- Pollution prevention was a major consideration during the planning stages of a transfer of an assembly operation's manufacturing responsibility to another site within the nuclear weapons complex. The donor site's previous process generated significant quantities of low-level and mixed low-level waste. A team of engineering and Environment, Safety and Health personnel reviewed the entire process for opportunities to minimize waste generation during production and closeout after production is completed, and to minimize the size of radiological control areas and the quantities of materials brought into those areas. As a result, electrochemical etch process rinse water will be purified and reused within the process, eliminating 3,000 gallons of low-level waste per month. The spent acid from the electrochemical etch process will be neutralized to convert it from a mixed low-level waste to an easier to manage low-level waste.
- An open chamber used by heating and cooling electrical components was replaced by a sealed chamber, eliminating the need for liquid nitrogen, and reducing the amount of perfluorinated polyether.
- Donated 400 used computers to local public school systems for student use.
- Used laser printer toner cartridges were collected and sent to a local remanufacturer.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Kansas City Plant may be obtained by contacting:

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Lawrence Berkeley National Laboratory

Lawrence Berkeley National Laboratory – 1995

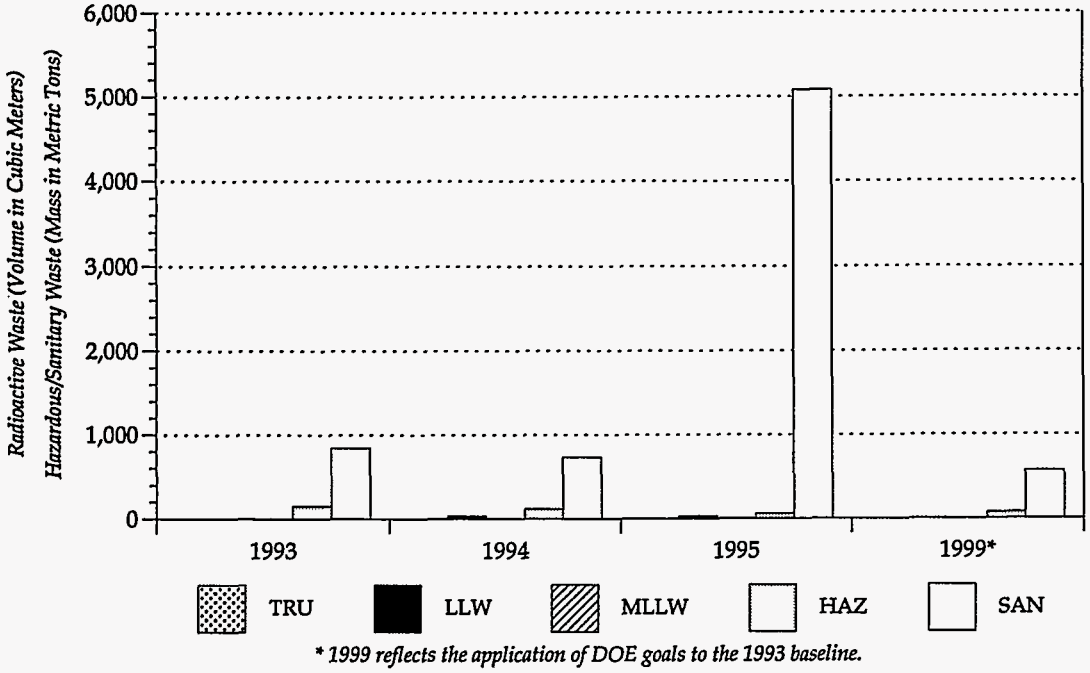
Location:	**Berkeley, California**
Site Size:	**140 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Energy Research**
DOE Employees:	**13**
Prime Contractor Employees:	**3,300**

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 with industry.

(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)

1995 Pollution Prevention Activities and Accomplishments

- Approximately 2,300 tons of concrete shielding was shipped to the Brookhaven National Laboratory for reuse in the Relativistic Heavy Ion Collider. This collaborative project, supported by the Energy Research and Environmental Management programs, resulted in an estimated savings of $7.2 million in 1995. The Lawrence Berkeley National Laboratory has begun work on an environmental assessment for the possible release of most of the remaining concrete shielding.
- In 1994, a spent abrasives waste Pollution Prevention Opportunity Assessment enabled a facility to identify and implement operating changes, greatly reducing the amount of lead and cadmium contamination in the wastestream. In 1995, most of the spent abrasives generated at the Lawrence Berkeley National Laboratory were determined to be nonhazardous, and were recycled onsite as fill. Changes in the process have resulted in a decrease in this wastestream to 1.4 metric tons in 1995, compared to 6.8 metric tons in 1993, saving approximately $80,460 annually.
- The main photo lab converted its wet photographic process to a digital process, which reduced annual hazardous waste generation by approximately 5.6 metric tons, for an estimated annual savings of $100,000.
- An evaporator was purchased and installed at the Building 77 shops, which reduced the amount of coolant shipped offsite for recycling by 2.9 metric tons per year (approximately 75 percent), saving approximately $43,210 annually.

Materials Recycled by the Lawrence Berkeley National Laboratory in 1995

Recycled Material	Lawrence Berkeley National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	358	22,075
Paper	33	9,354
Other Materials*	4,148	50,220
GRAND TOTAL	*4,539*	*83,257*

* *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.*

- Mulching equipment and two chippers were purchased, enabling the mulching of 3,600 metric tons of yard waste.
- More than 55 percent of office waste was recycled at two offsite locations. Large dumpsters of at least 20 cubic yard capacity were designated for recyclable or sanitary landfill items. Typically, 85 to 92 percent of office waste was recycled, and the remainder was sent to the landfill. Paper products comprised 80 to 85 percent of the materials recycled; the remainder was a mix of glass, aluminum, and plastic.
- Materials recycled include fluorescent light bulbs, concrete, wood, organics, and metals.

This fact sheet contains information provided by the site. 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
Oakland, CA 94612-5208
510-637-1638, FAX 510-637-1646

Shelley A. Worsham
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One Cyclotron Rd., MS-85B
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510-486-6123, FAX 510-486-6603

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Lawrence Livermore National Laboratory

Lawrence Livermore National Laboratory – 1995

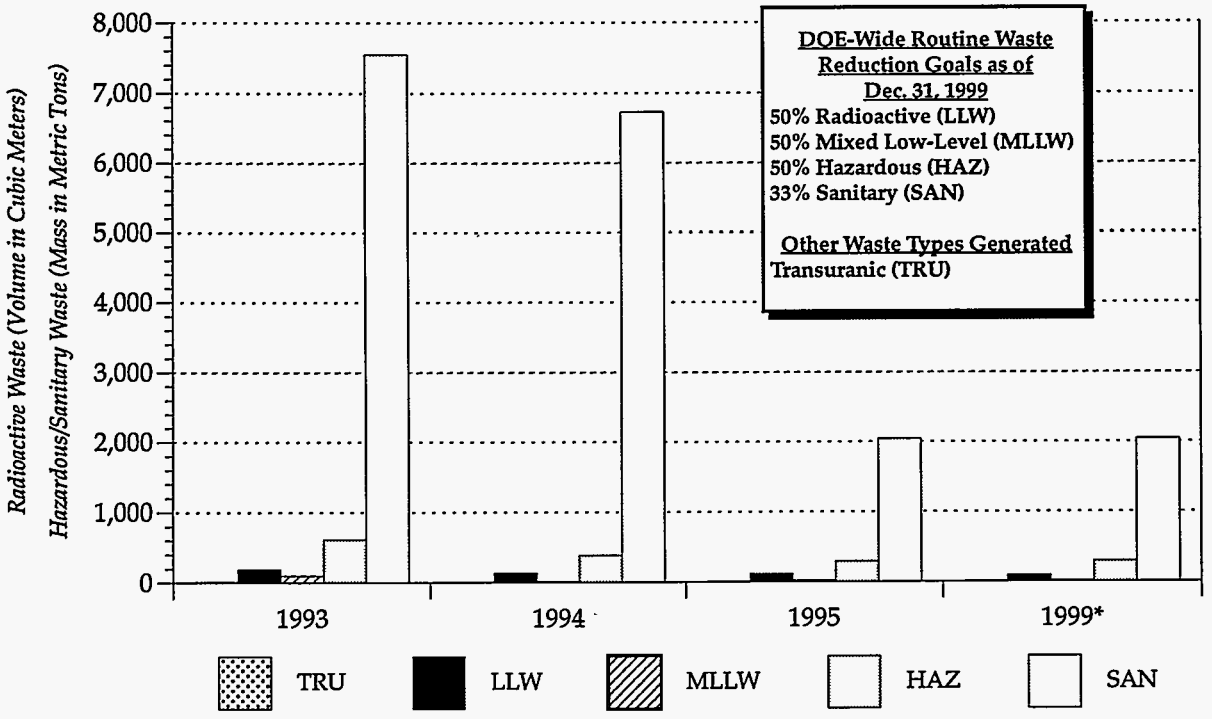
Location:	**Livermore, California**
Site Size:	**7,821 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Defense Programs**
DOE Employees:	**164**
Prime Contractor Employees:	**7,583**

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)

1995 Pollution Prevention Activities and Accomplishments

- A microseparator was used to separate the over-sprayed paint solids from recirculated water in the spray booth. This unit has reduced waste generation from 11.8 metric tons in calendar year 1993 to zero in calendar year 1995, saving approximately $354,500.
- The building drain repair project assessed over 26,000 water discharge sources, and identified sources needing repairs. This project was completed in September 1995, and resulted in nearly 400 sources being re-directed or eliminated, reducing potential discharges to the ground.
- Approximately 25,000 gallons of stored diesel fuel was shipped as a waste oil to a recycling facility, or it was recycled onsite by a contractor for use by the motor pool. In addition, 6,700 gallons of excessed Shell Diala-oil was removed from a transformer and donated to a school system to be reused by their heating system.
- In calendar year 1994, the engineering directorate obtained a treatment permit to enable two-part epoxies to be combined and cured, rendering them nonhazardous prior to disposal. Approximately 150 kilograms of epoxies were treated in calendar year 1995, saving approximately $4,500 in hazardous disposal costs.

Materials Recycled by the Lawrence Livermore National Laboratory in 1995

Recycled Material	Lawrence Livermore National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	61	1,608
Metals	1,242	22,075
Paper	473	9,354
Other Materials*	1,270	50,220
GRAND TOTAL	*3,046*	*83,257*

* *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.*

- Previously, 100 milliliters of tetrahydrofuran was used in an extraction process that generated a low-level mixed waste. An employee recommended substituting 10 milliliters of acetonitrile, enabling a 90 percent reduction in low-level mixed waste generated by the analytical laboratory.
- In 1995, 5,467 cubic feet of trailer floor space was removed from the Laboratory's space inventory. The trailers weighed approximately 45.6 tons, and approximately 73 percent (by weight) was sold through Donation Utilization and Sales. Approximately 27 percent of the trailers were demolished.
- Boilers accounted for over 65 percent of the total air emissions in calendar year 1994. Four boilers were replaced or retrofitted with new NOx burners.
- The generation of vacuum pump oil, a hazardous waste in the State of California, was eliminated.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Lawrence Livermore National Laboratory may be obtained by contacting:

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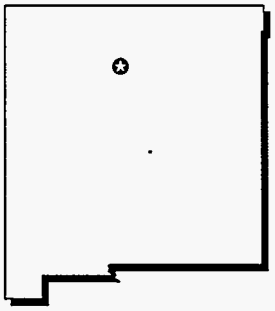
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Los Alamos National Laboratory



Los Alamos National Laboratory – 1995

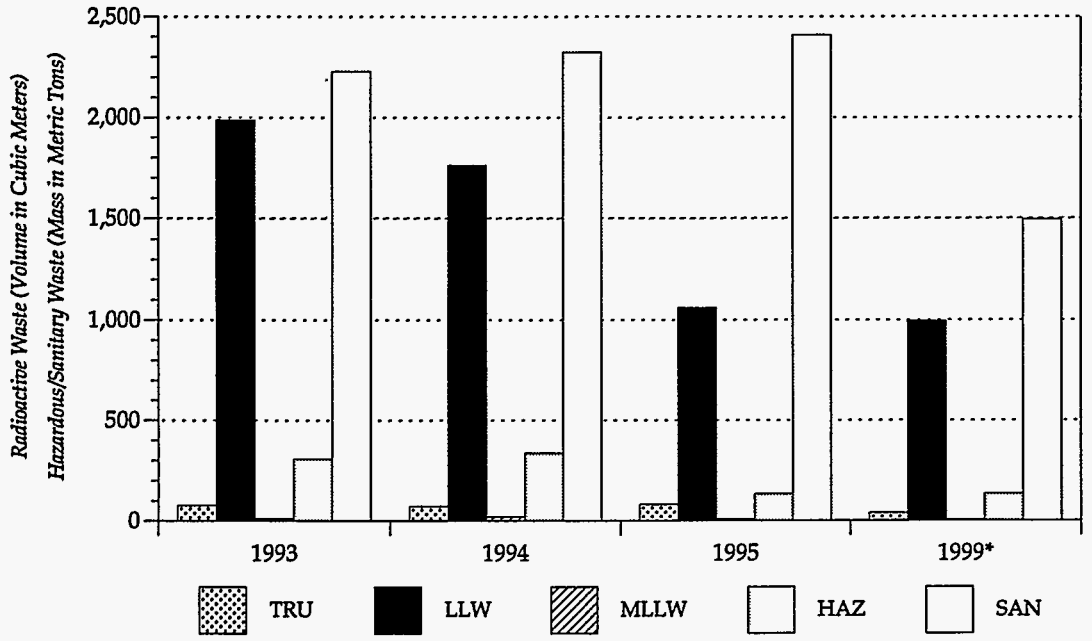
Location:	**Los Alamos, New Mexico**
Site Size:	**27,520 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**80**
Prime Contractor Employees:	**8,258**

Facility Mission

The Los Alamos National Laboratory, operated and managed by the University of California, 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



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)

1995 Pollution Prevention Activities and Accomplishments

- The Environmental Restoration Program at Los Alamos National Laboratory avoided over 11,108 cubic meters of low-level waste, 12,997 cubic meters of mixed low-level waste, 150 metric tons of RCRA regulated waste, and 210 metric tons of sanitary waste by planning for pollution prevention prior to project execution and ensuring pollution prevention implementation. Some specific techniques used were: developing waste implementation plans, which included wastestream projections and disposition options; using a grid system to define the contamination reduction and exclusion zones; pre-screening areas to determine the necessary level of personal protective equipment needed; identifying boring techniques that generate fewer cuttings (rotary hand augers, cone penetrometer tests, minimizing the diameter and "kerf" of drilling/core barrels); training workers in techniques to contain contamination while entering and exiting an area; returning excess samples to the site for disposition during final remediation; using personal protective and other equipment that can be decontaminated and reused; using in situ remedies where possible; and using contract incentives to encourage pollution prevention in every effort.

Materials Recycled by the Los Alamos National Laboratory in 1995

Recycled Material	Los Alamos National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	116	1,608
Metals	467	22,075
Paper	341	9,354
Other Materials*	7,661	50,220
GRAND TOTAL	*8,585*	*83,257*

* *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.*

- By replacing caustic soda and sulfuric acid with buffer salts as demineralizers in boilers at the steam plant, the Laboratory is avoiding approximately 9,800 kilograms of hazardous materials use annually.
- Through solutions communicated in the Environmental Stewardship Office Materials Substitution Committee, the Laboratory has reduced its annual trichloroethylene use from 2,000 pounds to 250 pounds, and reduced its tetrachloroethylene use from 6,000 pounds to only 158 pounds.
- Approximately 61 metric tons of excess construction materials and supplies were diverted from disposal through the development of a Construction Materials Recycle Center. The Center provides excess electrical supplies, plumbing supplies, hardware, wood, copper, and steel for reuse in mission projects, and works much like the chemical exchange and excess equipment distribution systems.
- Approximately 35 metric tons of sludge from the sanitary wastewater system is used as soil enhancer on Laboratory lands annually, and nine metric tons of cooling tower sediment is reused in a sand/salt mixture to melt show and enhance traction during winter months.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Los Alamos National Laboratory may be obtained by contacting:

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U.S. Department of Energy Operations Office, Albuquerque
P.O. Box 5400
Albuquerque, NM 87185-5400
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Thomas P. Starke
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Mound Plant

Mound Plant – 1995

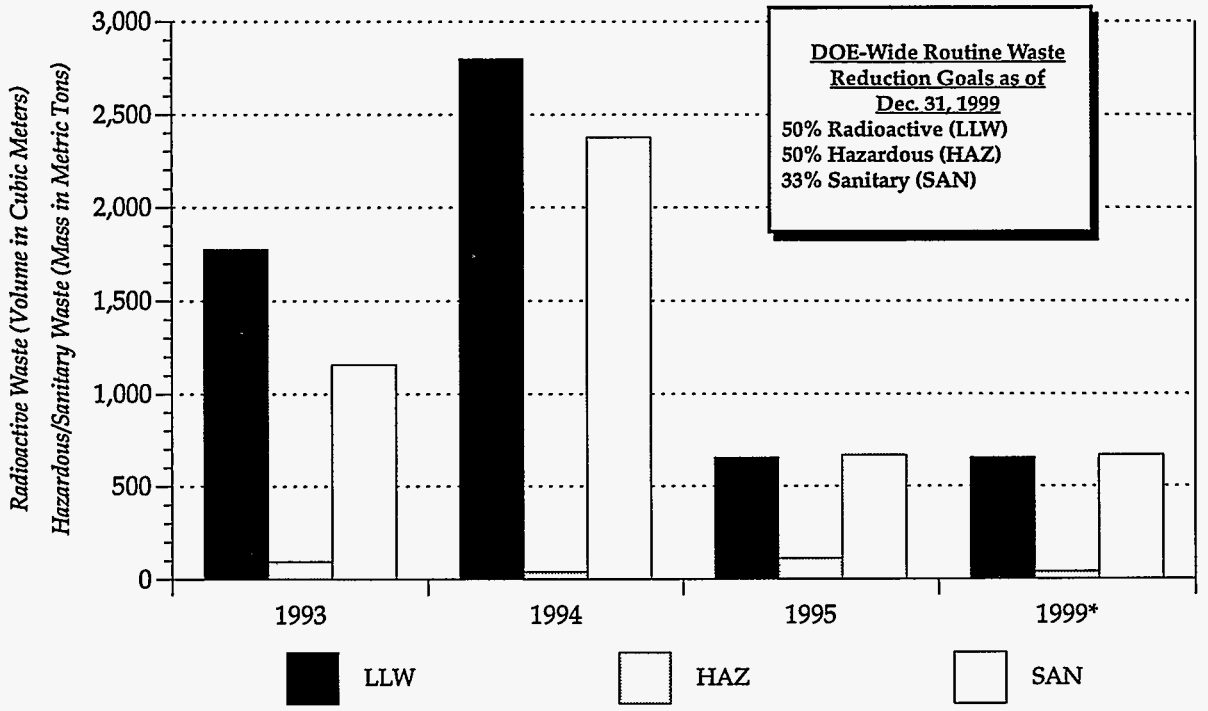
Location:	**Miamisburg, Ohio**
Site Size:	**306 Acres**
Operations Office:	**Ohio**
Lead Program Office:	**Environmental Management**
DOE Employees:	**131**
Prime Contractor Employees:	**1,100**

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)

1995 Pollution Prevention Activities and Accomplishments

- A reduction in onsite transuranic and mixed transuranic waste inventory was accomplished by repackaging and characterizing existing waste. A similar reduction was achieved for the mixed low-level waste inventory.
- Sanitary waste generation decreased in 1995, partly due to waste minimization awareness efforts.
- A Pollution Prevention Opportunity Assessment was performed to identify and evaluate options for reducing chemical inventories in the R/SW Building and T Building, and the associated potential for generation of mixed wastes as these chemicals are disposed. Five actions were considered by this assessment; one was recommended for further study, four were accepted for implementation without further study, and one was rejected.

Materials Recycled by the Mound Plant in 1995

Recycled Material	Mound Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	4	1,608
Metals	18	22,075
Paper	50	9,354
Other Materials*	13	50,220
GRAND TOTAL	*85*	*83,257*

* *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.*

- A Pollution Prevention Opportunity Assessment identified and evaluated options for minimizing waste in the handling of "Special" items. This assessment considered two actions, and both were accepted for implementation.
- A Pollution Prevention Opportunity Assessment was conducted to identify and evaluate options for waste minimization in the processing of "Special-Special" items and materials. Two actions were considered, and both were recommended for further study and implementation.
- Mound recognizes and rewards ideas for improvement, including waste minimization, through its Cost Improvement Action program. Employees are encouraged to always be thinking about process changes, cost savings, and waste minimization.
- Low-level, Resource Conservation Recovery Act regulated hazardous, and Toxic Substances Control Act regulated hazardous waste increased in 1995 due to increased cleanup and site restoration activities; however, accelerated waste shipment avoided large buildups in year-end inventories.
- Five of the nine Pollution Prevention Opportunity Assessments planned for 1995 were completed, resulting in a number of actions which were accepted for further study or immediate implementation. The remaining four assessments were not completed due to loss or reassignment of key personnel.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Mound Plant may be obtained by contacting:

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Waste Generation and Pollution Prevention Progress Fact Sheet

Naval Petroleum Reserve No. 1

Naval Petroleum Reserve No. 1 – 1995

Location:	**Tupman, California**
Site Size:	**47,409 Acres**
Operations Office:	**Headquarters**
Lead Program Office:	**Fossil Energy**
DOE Employees:	**46**
Prime Contractor Employees:	**523**

Facility Mission

The mission of the Naval Petroleum Reserve No. 1 is to produce oil and gas at a Maximum Efficient Rate for sale to the highest contractual bidder. While fulfilling this congressional mandate, the Naval Petroleum Reserve No. 1 is dedicated to ensuring that all health, safety, and environmental values are protected and maintained in accordance with law and the highest orders of common sense.

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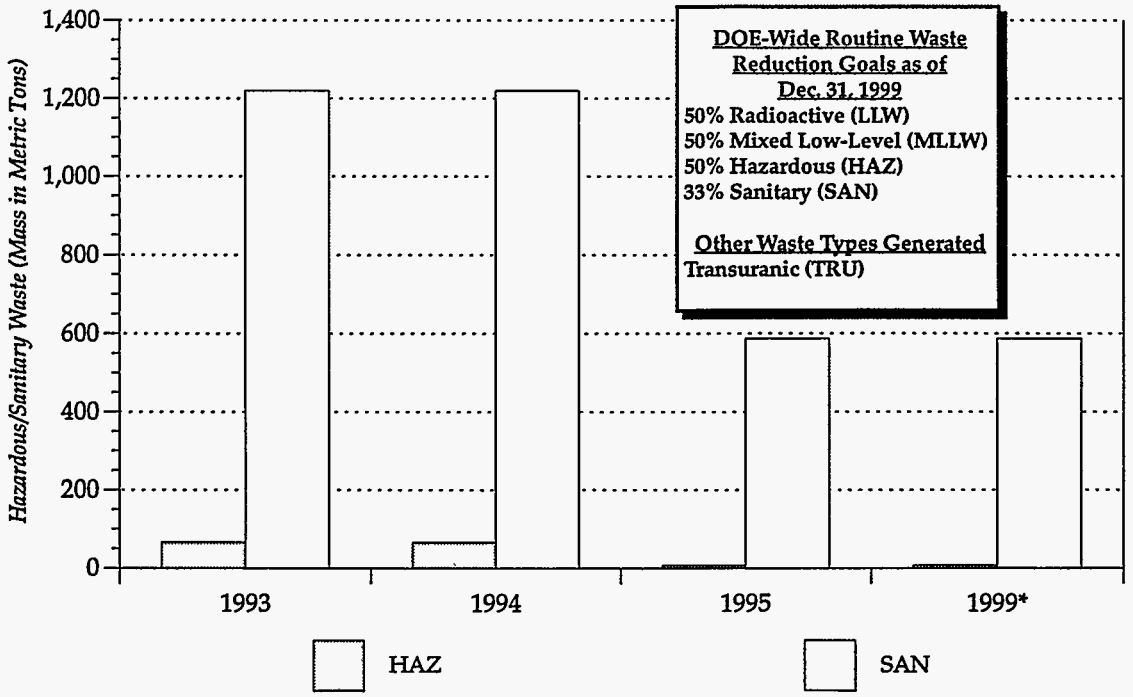
Routine Waste Generation and Projected Reduction by Waste Type



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

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- Despite the high volumes of crude oil and gas generated at the Naval Petroleum Reserve No. 1, relatively low volumes of waste were generated, due to efficient management practices.
- The Naturally Occurring Radioactive Materials (NORM) Program requires that oil field pipe, valves, and other equipment be checked for low-level radioactive contamination before reuse. After removing the contaminated residue from the equipment, the equipment may be reused, reducing new purchases and scrap metal waste.
- By ordering chemicals and other materials in bulk, packaging requiring disposal was reduced or eliminated.
- Chemicals and other materials were ordered on an as-needed basis, reducing warehouse storage costs.
- Materials reused and/or recycled include tires, automotive batteries, and filters.
- Materials recycled include spent solvents, corrosive liquids, scrap metals, scrap wood, wooden crates, pallets, drums, aerosol liquids, paper, cardboard, aluminum cans, ni-cad batteries, toner cartridges, Safety Kleen solvent, waste oil.

Materials Recycled by the Naval Petroleum Reserve No. 1 in 1995

Recycled Material	Naval Petroleum Reserve No. 1 *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	37	1,608
Metals	1,373	22,075
Paper	118	9,354
Other Materials*	88	50,220
GRAND TOTAL	*1,616*	*83,257*

* *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.*

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Naval Petroleum Reserve No. 1 may be obtained by contacting:

Gary D. Walker, U.S. Department of Energy
Naval Petroleum Reserves in California
P.O. Box 11, 28590 Hwy. 119
Tupman, CA 93276
805-763-6021, FAX 805-763-6699

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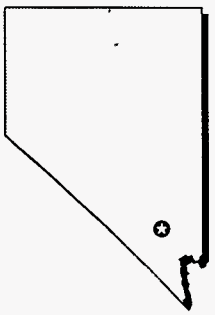
Waste Generation and Pollution Prevention Progress

Fact Sheet

Nevada Test Site



Nevada Test Site – 1995

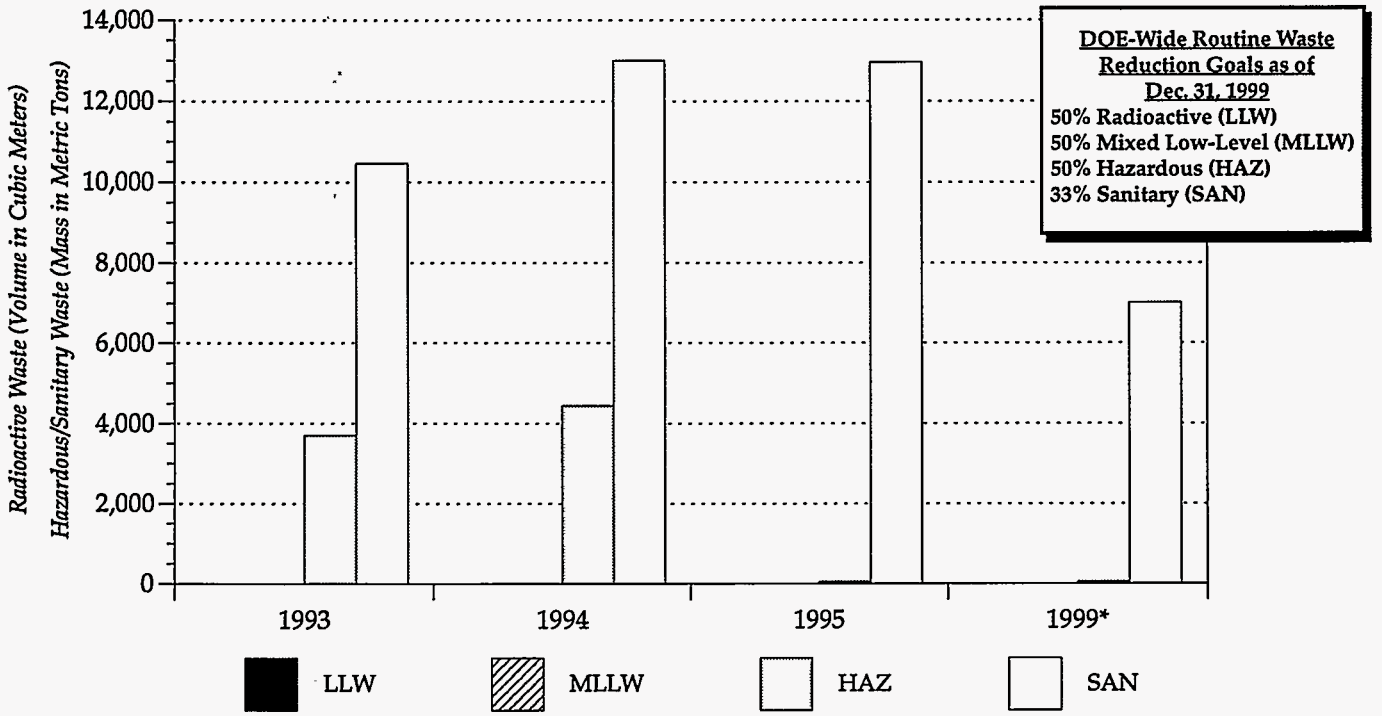
Location:	**Mercury, Nevada**
Site Size:	**864,000 Acres**
Operations Office:	**Nevada**
Lead Program Office:	**Defense Programs**
DOE Employees:	**14**
Prime Contractor Employees:	**1,365**

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)

1995 Pollution Prevention Activities and Accomplishments

- DOE/Nevada has developed a waste minimization and pollution prevention awareness program for activities under its purview. The program is two-tiered (site-wide and generator-specific). DOE/Nevada published the site-wide program plan and guidance. Each generator is responsible for developing a generator-specific implementation plan.

- In July 1995, 34 drums of spent filters were shipped to an offsite vendor for recycling. Each drum contained approximately 1,800 spent filters. The recycling of these filters avoided remediation costs of as much as $100,000 per 10-foot square area.

- Two Pollution Prevention Opportunity Assessments were performed in calendar year 1995. One was implemented, resulting in an estimated annual cost savings of $7,650.

Materials Recycled by the Nevada Test Site in 1995

Recycled Material	Nevada Test Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	573	1,608
Metals	4,226	22,075
Paper	151	9,354
Other Materials*	0	50,220
GRAND TOTAL	*4,950*	*83,257*

* *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.*

- Forty-six ounces of silver were recovered from photographic processing chemicals at the Control Point photo lab located at the Nevada Test Site.

- Effective May 1, 1995, all orders for products containing hazardous material must be approved by the Department's Environmental Compliance Coordinator before processing.

- Contractors participate in several community outreach programs, including Earth Day, Science Bowl, and the Whitney Mesa Educational Nature Preserve.

- Contractors are members of the DOE/Nevada Waste Minimization/Pollution Prevention Task Force, which ensures coordination of activities, information sharing, and technology transfer. The Task Force enhances coordination and communication among the various contractors. Each contractor has an incentive program for waste minimization/pollution prevention suggestions.

- Materials recycled include copper and aluminum.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Nevada Test Site may be obtained by contacting:

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Las Vegas, NV 89193-8521
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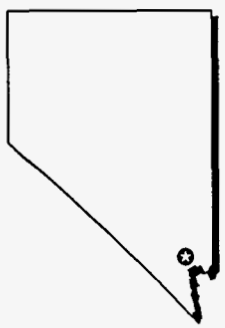
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

North Las Vegas Facility



North Las Vegas Facility – 1995

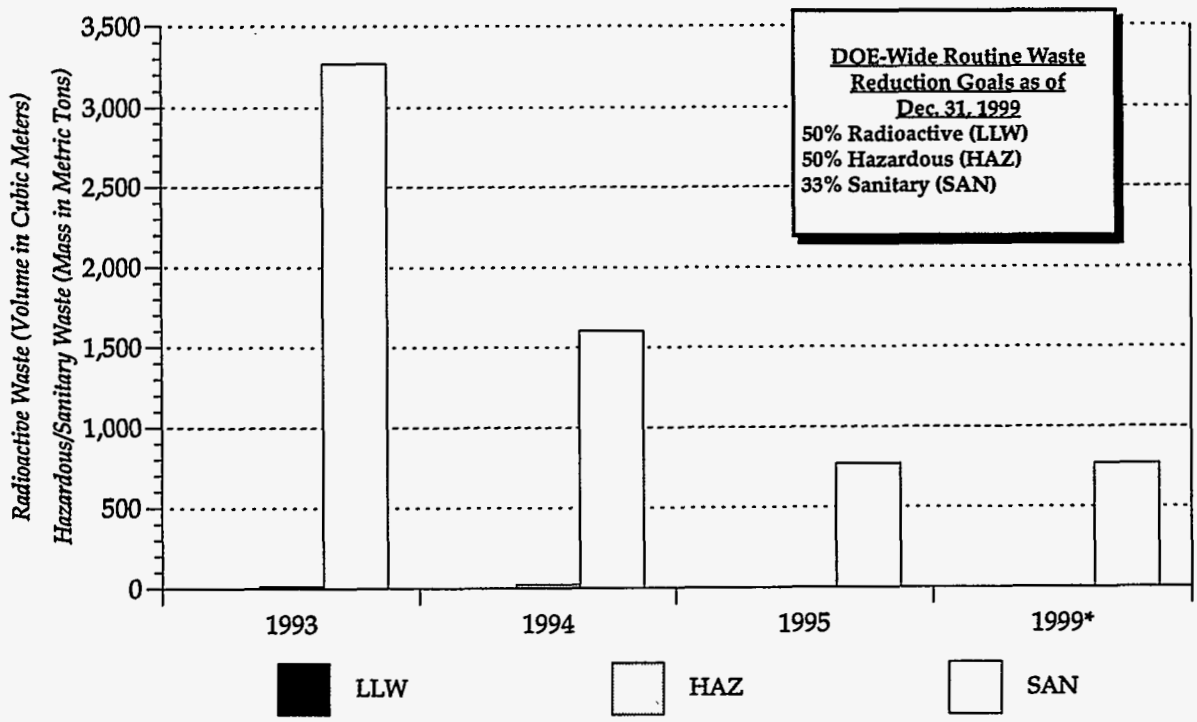
Location:	**North Las Vegas, Nevada**
Site Size:	**125 Acres**
Operations Office:	**Nevada**
Lead Program Office:	**Defense Programs**
DOE Employees:	**60**
Prime Contractor Employees:	**1,023**

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 at the Nevada Test 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)

1995 Pollution Prevention Activities and Accomplishments

- The recycling program and Operations Security were integrated into a site-wide recycling program, saving $42,000 in dumpster pickups. In fiscal year 1995, 115,360 pounds of paper was shredded and recycled. Other materials recycled include toner cartridges, aluminum cans, cardboard, lead acid batteries, tires, oils, antifreeze, chlorofluorocarbons, and scrap metals.
- Returned 16,000 pounds of unused excess chemicals to the original vendor.
- Returned 10 compressed gas cylinders containing a combined total of 1,268 cubic feet of gas to the vendor.
- The Remote Sensing Laboratory eliminated 42 chemicals from inventory.
- The Remote Sensing Laboratory installed a Digitron Electrolytic closed-loop silver recovery system on its film and paper processors. The photo lab harvested 41.5 pounds of silver in fiscal year 1995, worth approximately $2,600. The Digitron system also reduces photographic fixer consumption by 50 percent.

Materials Recycled by the North Las Vegas Facility in 1995

Recycled Material	North Las Vegas Facility *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	2	1,608
Metals	3	22,075
Paper	168	9,354
Other Materials*	1	50,220
GRAND TOTAL	*174*	*83,257*

* *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.*

- A Versatech plotter (model 7236) was replaced by a Versatech laser plotter (model 8836), which eliminated the generation of 90 gallons of chemical waste.
- Returned 32 kilograms of mercuric chloride and one quart of Orosene gold to the manufacturer.
- Waste minimization suggestions that result in cost savings or reduced pollution are eligible for monetary awards. This incentive has been emphasized in Standard Operating Procedure No. 31-006, "Waste Minimization Plan." Employees with creditable suggestions are eligible to receive a DOE/North Las Vegas Pollution Prevention polo shirt or a car window shade.
- In fiscal year 1995, 10 Pollution Prevention Opportunity Assessments were conducted, and six were implemented.
- Management and employees are routinely instructed in waste minimization, environmental awareness, and pollution prevention policies and procedures.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the North Las Vegas Facility may be obtained by contacting:

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Las Vegas, NV 89193-8518
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P.O. Box 98521, MS-004
Las Vegas, NV 89193-8521
702-295-2985, FAX 702-295-5229

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Oak Ridge K-25 Site

Oak Ridge K-25 Site – 1995

Location:	**Oak Ridge, Tennessee**
Site Size:	**706 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**18**
Prime Contractor Employees:	**3,620**

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.

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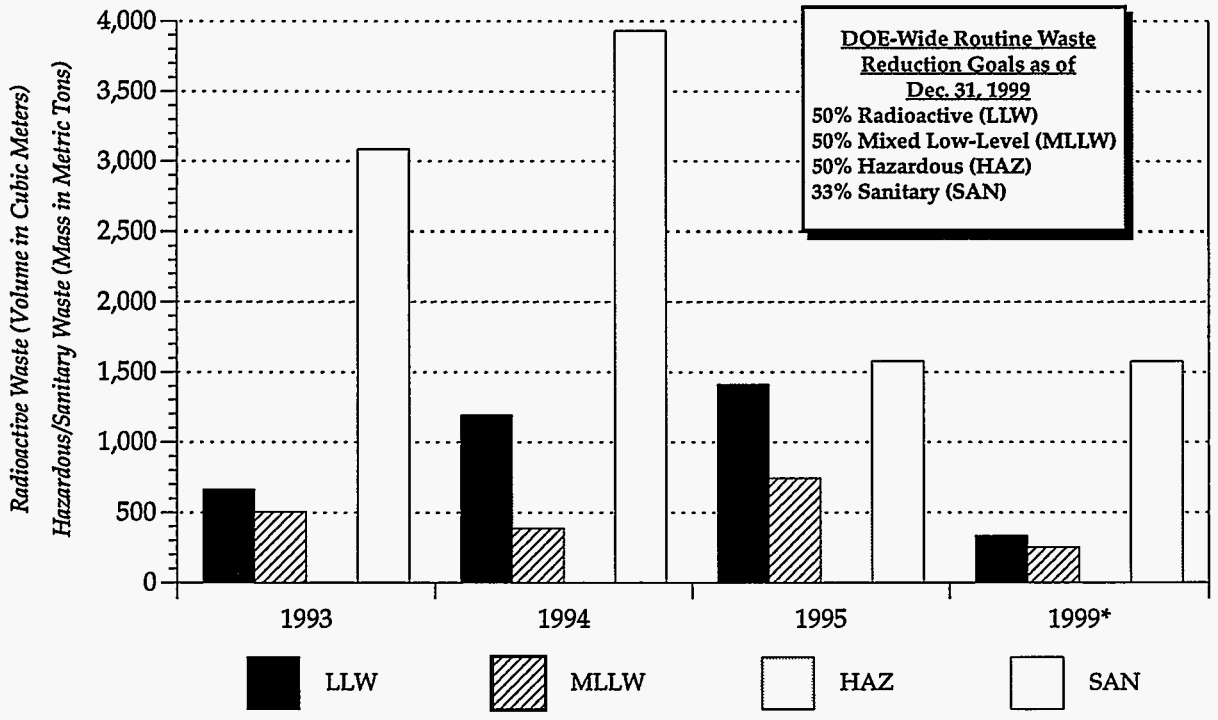
Routine Waste Generation and Projected Reduction by Waste Type



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

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- An equipment transfer program transferred contaminated uranium hexafluoride gaseous diffusion enrichment equipment such as pumps, motors, and valves to operating gaseous diffusion plants for reuse. During calendar year 1995, approximately $2 million in cost savings was achieved by transferring 98,960,000 kilograms of enrichment equipment to the Portsmouth Gaseous Diffusion Plant in Portsmouth, Ohio.
- The purchase of a reduced flow rate sampling apparatus and "micro-purging" sampling techniques reduced sanitary wastewater generation by 247,654 kilograms, saving approximately $427,836 per calendar year.
- The Swap Shop helped the Oak Ridge K-25 Site avoid waste through the exchange of approximately $310,546 worth of materials during calendar year 1995.
- Poly overpacks were sold for reuse, reducing waste generation by 25,200 kilograms, and saving $140,469.
- Downposting from a contamination area to a radioactive material storage area reduced the amount of Anti-C clothing needed for operation, and minimized the risk of employee exposure. Approximately 625 square feet were downposted at building K-1423 South Transfer Room, 11,600 square feet at building K-310-2, and 9,860 square feet at building K-311-1, for an estimated cost savings of $50,599, $22,810, and $18,892 respectively.
- Wooden scaffolds were replaced by metal scaffolds that can be disassembled and reused, eliminating 6,552 kilograms of low-level waste wood, and saving $44,312 per calendar year.
- A Non-Destructive Testing Model film processing unit was installed, which reduced liquid photographic waste at the source by 463,284 kilograms, and reduced rags used to wipe chemical spills by five kilograms, for total savings of $23,527 per calendar year.
- Installation of ion chromatography instruments and self-suppressing detectors reduced the amount of waste solutions by 115.12 kilograms, saving $22,300 per calendar year.
- Lead gauge seals were replaced by nonhazardous plastic seals, reducing waste by 11 kilograms.
- Approximately 100 tires were sent offsite for retreading and reuse.

Materials Recycled by the Oak Ridge K-25 Site in 1995

Recycled Material	Oak Ridge K-25 Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	5	1,608
Metals	36	22,075
Paper	344	9,354
Other Materials*	4	50,220
GRAND TOTAL	*389*	*83,257*

* *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.*

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Oak Ridge K-25 Site may be obtained by contacting:

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Oak Ridge, TN 37830
423-241-2224, FAX 423-576-5333

Belgin Barkenbus
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Oak Ridge National Laboratory

Oak Ridge National Laboratory – 1995

Location:	**Oak Ridge, Tennessee**
Site Size:	**35,000 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Energy Research**
DOE Employees:	**31**
Prime Contractor Employees:	**5,855**

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.

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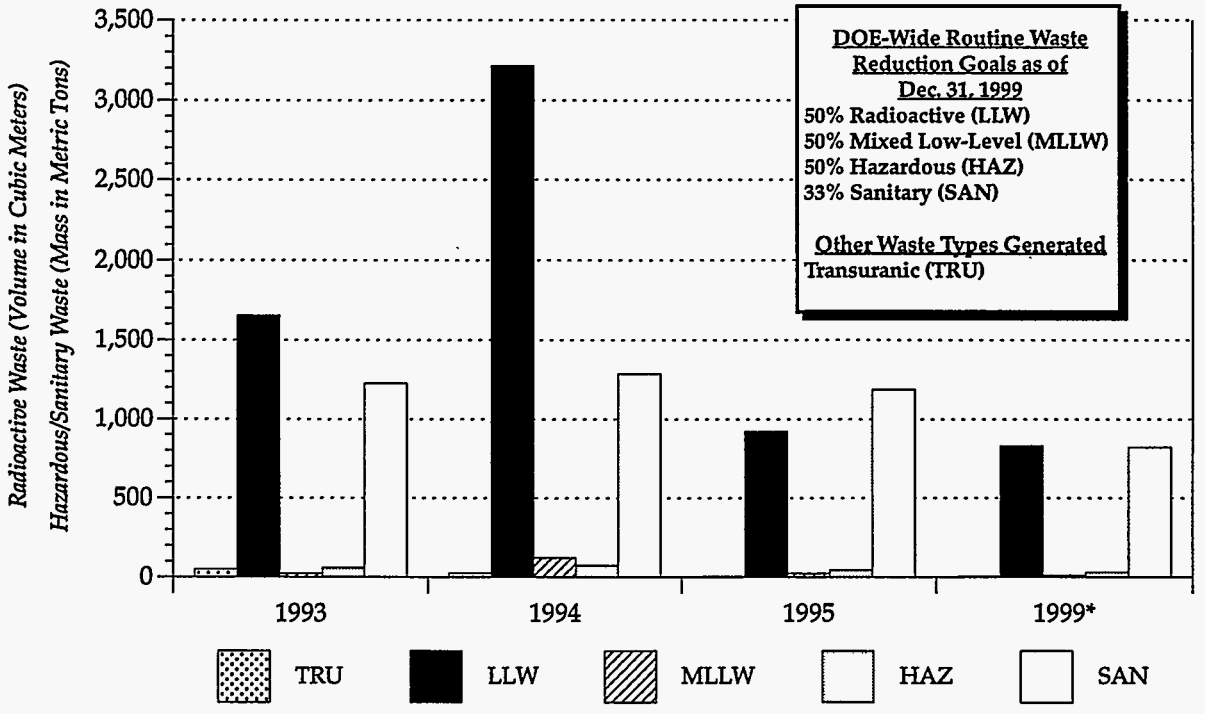
Routine Waste Generation and Projected Reduction by Waste Type



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

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- Shipped 9,300 lead bricks to the Thomas Jefferson National Accelerator Facility for reuse as shielding material.
- Shipped 2,109 metric tons of coal ash to an offsite vendor, where it was burned and incorporated into cement.
- The recycling of #2 plastic containers by an outside vendor eliminated 173 kilograms of waste and saved $840.
- The Photography Department installed an electrolytic silver recovery unit, eliminating a Resource Conservation Recovery Act regulated hazardous wastestream. After the silver is recovered from the photographic process chemicals, it is sold for reuse.
- Fluorescent bulbs are collected, surveyed for radioactivity, and sent to an outside vendor for recycling, reducing the hazardous wastestream by 99 percent.
- Resource Conservation Recovery Act regulated hazardous components are removed from spent light bulbs, enabling separate disposal of hazardous and nonhazardous components, reducing the hazardous wastestream by 90 percent.
- A catch basin for hydraulic oil pump and piping systems was constructed to eliminate the need for absorbent, and to reduce solid oily waste.

Materials Recycled by the Oak Ridge National Laboratory in 1995

Recycled Material	Oak Ridge National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	39	22,075
Paper	295	9,354
Other Materials*	2,115	50,220
GRAND TOTAL	*2,449*	*83,257*

* *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 white paper and aluminum can recycling program continued to expand, both in the number of collection sites and in the volume collected. Mixed paper recycling was begun, and recycling of lab plastic was begun on a limited basis.
- An additional surge tank (L-7A) was installed in the 3544 Process Waste Treatment Plant, enabling evaporator overheads be treated through the Process Waste System.
- Site employees received general pollution prevention training through videos.
- Developed and implemented the Oak Ridge Reservation Pilot Chargeback system.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Oak Ridge National Laboratory may be obtained by contacting:

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Susan R. C. Michaud
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Oak Ridge, TN 37831-6021
423-576-1562, FAX 423-241-2843

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Waste Generation and Pollution Prevention Progress

Fact Sheet

Oak Ridge Y-12 Plant

Oak Ridge Y-12 Plant – 1995

Location:	**Oak Ridge, Tennessee**
Site Size:	**800 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Defense Programs**
DOE Employees:	**86**
Prime Contractor Employees:	**5,419**

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.

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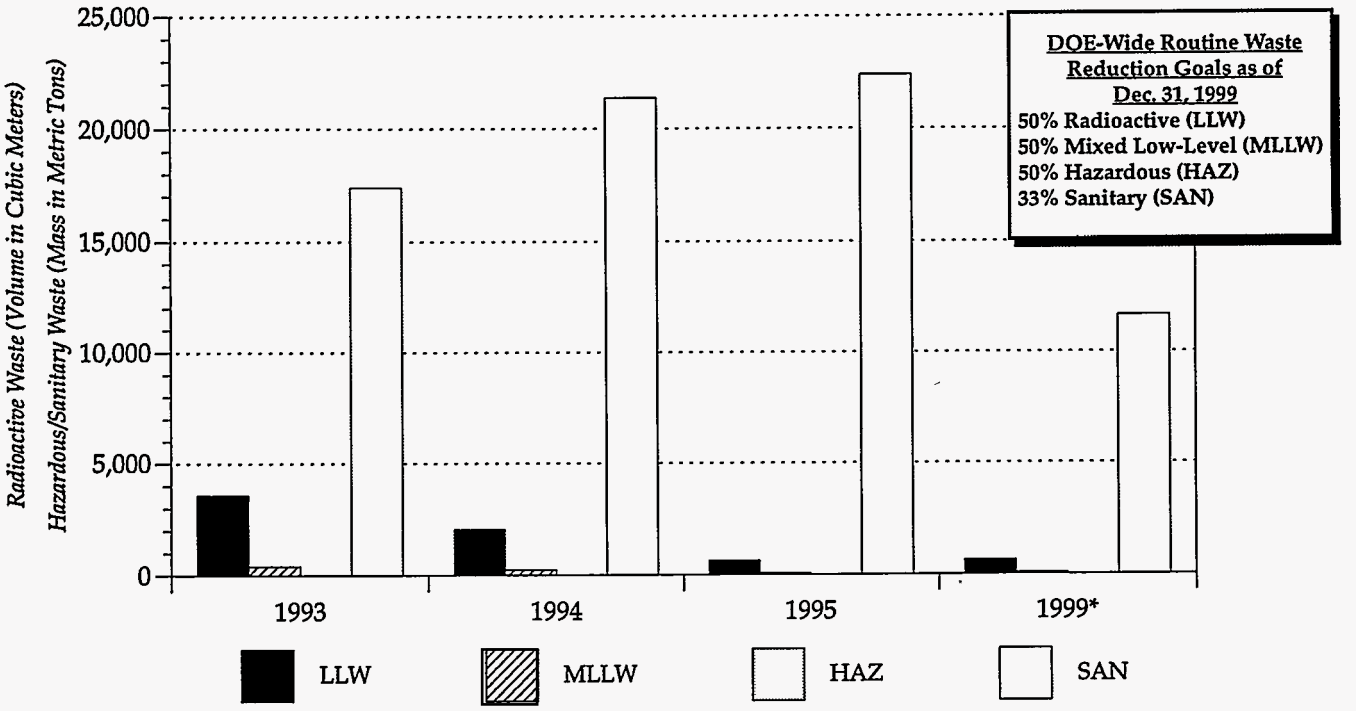
Routine Waste Generation and Projected Reduction by Waste Type



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

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- Approximately 4,500,000 kilograms of fly ash was recycled in 1995. The remaining fly ash (7,291 metric tons) were required to be used as filler material in the solid industrial waste landfill.
- Approximately 7,000 kilograms of automotive parts such as water pumps, air conditioning compressor pumps, master cylinders, wiper rotors, and alternators were recycled.
- A 30-foot by 60-foot asphalt/concrete pad was decontaminated, enabling the area to be used as a nonradiological material staging area. Approximately 300 cubic feet of shipping and packaging materials, including mixed paper and cardboard, is diverted from the radiological areas, avoiding contamination and disposal as contaminated waste.
- Approximately 300 gallons (946 kilograms) of antifreeze were recycled in calendar year 1995.
- Approximately 68 gallons of waste oil were filtered and recovered for reuse in calendar year 1995.
- Recycled 86 kilograms of plastic carboys.
- The Oak Ridge Y-12 Plant began recycling uncontaminated fluorescent bulbs in September 1995.
- Rechargeable alkaline batteries are used throughout the Plant.

Materials Recycled by the Oak Ridge Y-12 Plant in 1995

Recycled Material	Oak Ridge Y-12 Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	15	1,608
Metals	19	22,075
Paper	384	9,354
Other Materials*	4,620	50,220
GRAND TOTAL	*5,038*	*83,257*

* *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 Swap Shop allows participants with hazardous and nonhazardous surplus materials to list these materials on an electronic system for reuse.
- Baling operations at the Oak Ridge Y-12 Plant use a 4-mil recycled plastic to wrap bales of sanitary/industrial waste prior to transportation to the landfill.
- Distilled and reused tetrahydrofuran from Gel Permeation Chromatograph. Peroxide inhibitor is added to distilled tetrahydrofuran, allowing several additional uses.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Oak Ridge Y-12 Plant may be obtained by contacting:

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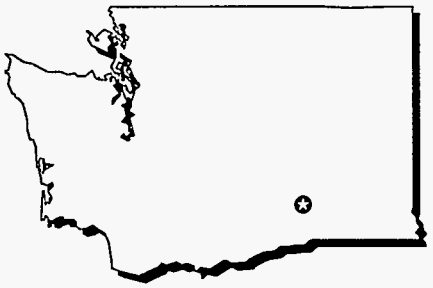
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Pacific Northwest National Laboratory



Pacific Northwest National Laboratory – 1995

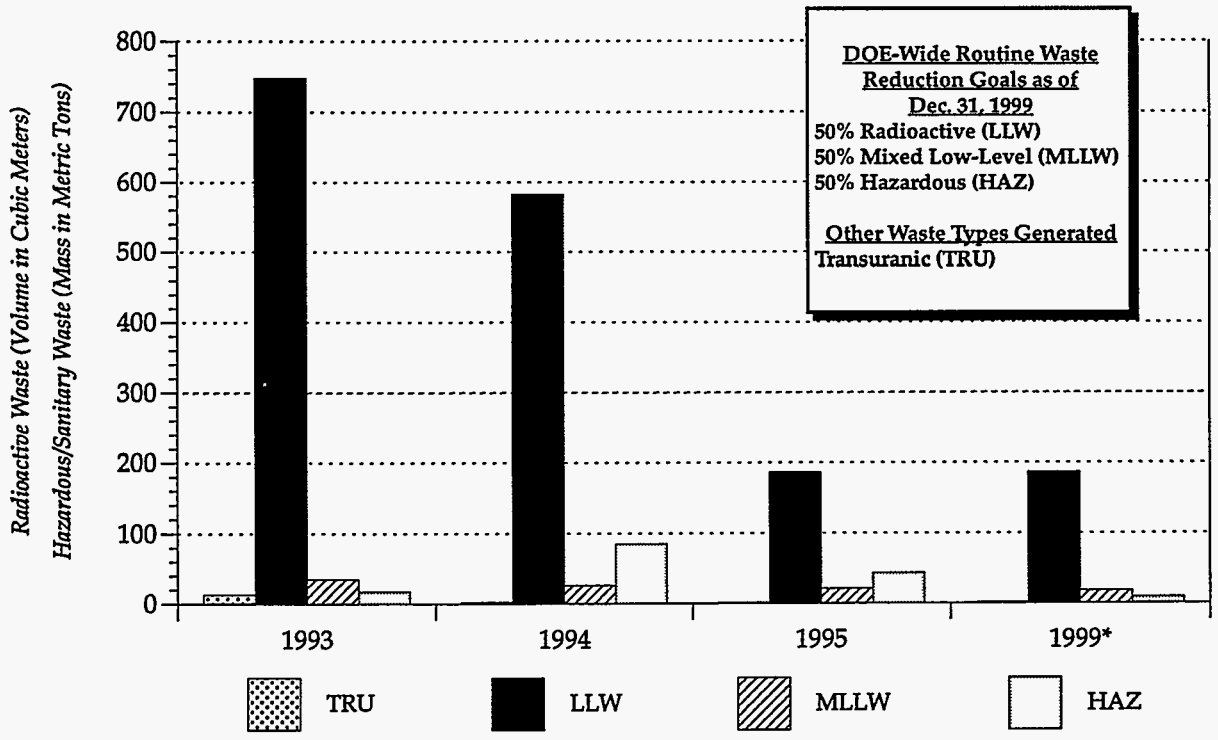
Location:	**Richland, Washington**
Site Size:	**4,840 Acres**
Operations Office:	**Richland**
Lead Program Office:	**Energy Research**
DOE Employees:	**555**
Prime Contractor Employees:	**3,625**

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)

1995 Pollution Prevention Activities and Accomplishments

- Twenty-five empty drums that would have been disposed as hazardous waste were returned to the vendor for reuse.
- The Pacific Northwest National Laboratory purchased five in-line process solvent recovery systems to recover hazardous and mixed wastes.
- Radioactively contaminated metal wastes generated by laboratory clean-outs were compacted using a vendor's supercompaction facilities.
- Waste oil containing heavy metals was sent to a vendor for recycling.
- Lead acid and gel cell batteries were recycled by an offsite vendor.
- Film negatives from the Pacific Northwest National Laboratory document control organization were sent to a vendor for recovery of silver (a regulated hazardous constituent).

Materials Recycled by the Pacific Northwest National Laboratory in 1995

Recycled Material	Pacific Northwest National Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	6	1,608
Metals	3,846**	22,075
Paper	67	9,354
Other Materials*	18	50,220
GRAND TOTAL	*3,937*	*83,257*

* *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.*

** *Site-wide totals for scrap metals are totals for entire Hanford Reservation.*

- A solvent recycling system was developed for the Pacific Northwest National Laboratory craft services organization, enabling the recycling and reuse of spent solvent.
- Empty printer toner cartridges were collected and returned to the vendor for remanufacturing and recycling. In exchange, the Pacific Northwest National Laboratory receives a rebate on the purchase of new toner cartridges.
- The Pacific Northwest National Laboratory sends obsolete software discs and packaging to a vendor for reprocessing and reuse.
- The Pacific Northwest National Laboratory is using the Chemical Management System (CMS) database to monitor the inventory of chemicals being used in its research laboratories, reducing the need to purchase new chemicals.
- The Pacific Northwest National Laboratory implemented an electronic document preparation and approval process that eliminated the need for paper copies of time card and purchase requisition records.
- Materials recycled include office paper, corrugated cardboard, mixed paper, newsprint, magazines, glass, plastic, tin, and aluminum.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Pacific Northwest National Laboratory may be obtained by contacting:

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

Jill Engel-Cox
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Richland, WA 99352
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Paducah Gaseous Diffusion Plant

Paducah Gaseous Diffusion Plant – 1995

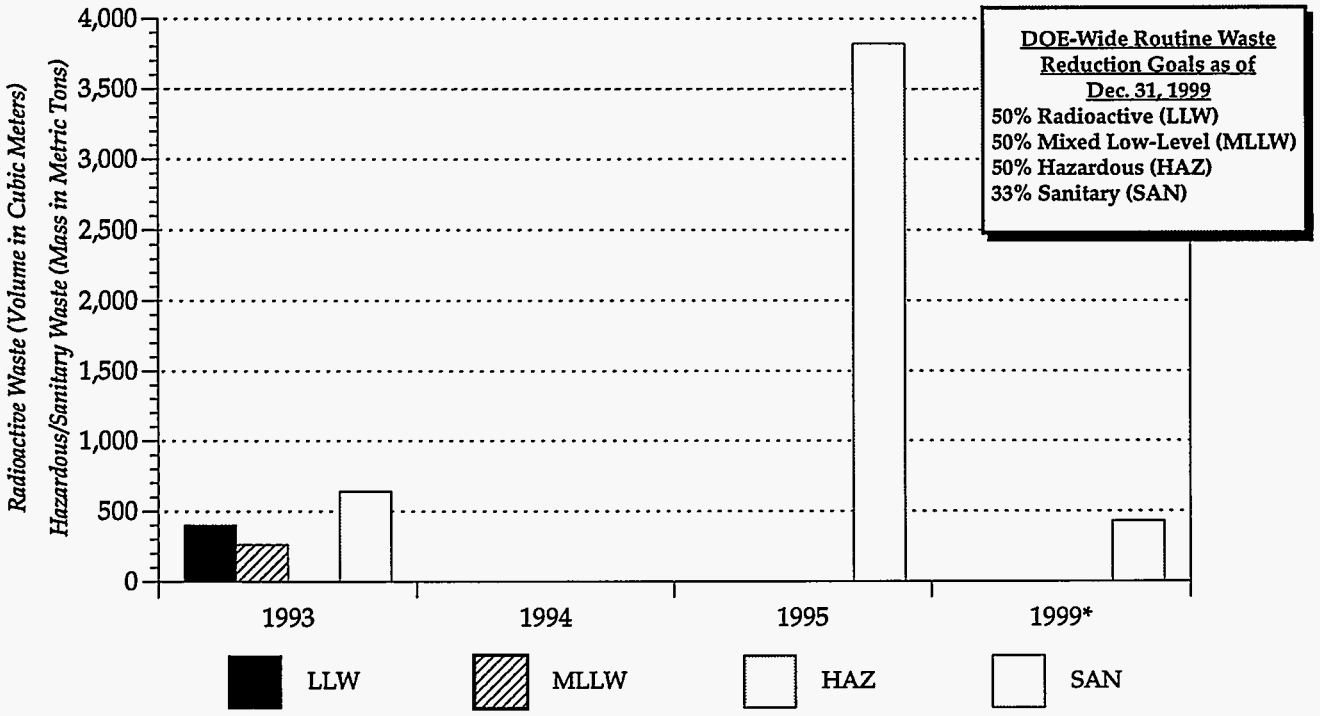
Location:	**Paducah, Kentucky**
Site Size:	**740 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**22**
Prime Contractor Employees:	**223**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Paducah Environmental Management and Enrichment Facility Waste Minimization Program continued to fulfill the requirements of all DOE and Executive Orders and environmental regulations in 1995. The site "Waste Minimization Plan" provides strategies to reduce generation of all plant wastes. Continued improvements were made in the areas of segregation, substitution, and minimization of hazardous waste.
- The Kentucky Division of Waste Management approved a plan to use micropurging techniques during routine groundwater monitoring activities. This technique greatly reduced the amount of purge water generated during sampling, minimizing waste and pollution.
- Purchased equipment to prevent pollution in surface water runoff.

Materials Recycled by the Paducah Gaseous Diffusion Plant in 1995

Recycled Material	Paducah Gaseous Diffusion Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	<0.5	22,075
Paper	.7	9,354
Other Materials*	0	50,220
GRAND TOTAL	*7*	*83,257*

* *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.*

- Implemented a Pilot Generator Set-Aside Fee Program that taxes generators for waste produced during certain projects.
- Implemented a recycling program, including white office paper, aluminum cans, and toner cartridges.
- Environmental management activities performed at the Paducah Gaseous Diffusion Plant include environmental restoration, waste management, and decontamination and decommissioning.
- DOE operations include environmental restoration and waste management activities as well as a Depleted UF6 Cylinder Maintenance Program.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Paducah Gaseous Diffusion Plant may be obtained by contacting:

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

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Pantex Plant

Pantex Plant – 1995

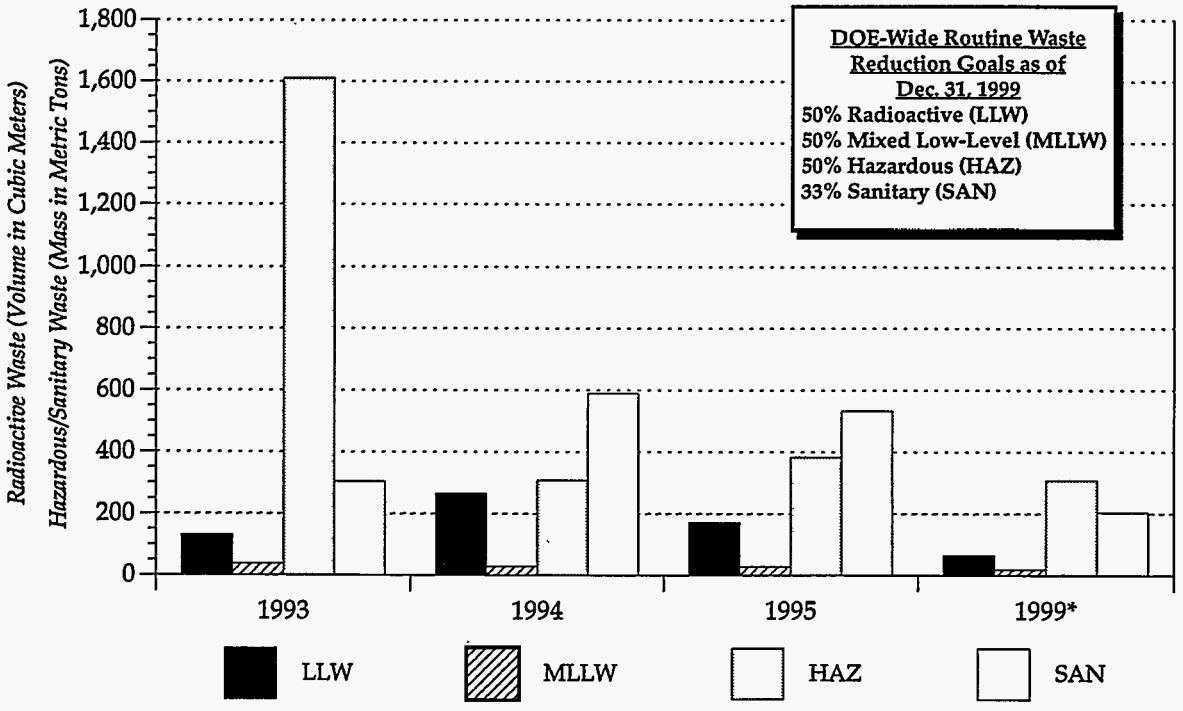
Location:	**Amarillo, Texas**
Site Size:	**15,836 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**206**
Prime Contractor Employees:	**3,367**

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)

1995 Pollution Prevention Activities and Accomplishments

- Asphalt waste was recycled and reused, saving over $2 million.
- Tritium-contaminated beryllium parts from the weapons dismantlement program were decontaminated and shipped to the Idaho National Engineering Laboratory for reuse, saving over $1 million.
- In 1995, the Pantex Plant initiated an aggressive solvent substitution program. Hazardous chemicals and solvents such as Hercules, Freon TF, Aquetane 330, Acetone, Actrel, CRC 2000, LPS Contact Cleaner, Blue & Gold, Toluene, and Flux Stripper have been replaced by nonhazardous (and in many cases recyclable) solvents, saving $79,000.
- The Pantex Plant implemented a precious metals recovery project, and sent electronic components to a vendor for precious metals recovery.

Materials Recycled by the Pantex Plant in 1995

Recycled Material	Pantex Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	29	1,608
Metals	221	22,075
Paper	146	9,354
Other Materials*	2,263	50,220
GRAND TOTAL	*2,659*	*83,257*

* *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.*

- Crushed concrete was reused as the base material for road work, and in the maintenance of dirt and gravel roads and temporary parking lots.
- The Pantex Plant's photography lab has begun to convert from chemical photographic processing (hazardous) to digital processing (nonhazardous).
- The Pollution Prevention Group continued to raise public and employee awareness of pollution prevention through its two year commitment to the "Adopt-A-Highway" program.
- In 1995, the Pollution Prevention Group developed and implemented a computer-based multimedia pollution prevention training course for continued training of employees. The Group continues to provide initial employee pollution prevention training in a classroom environment.
- In December 1995, the Pollution Prevention Group initiated a program to perform pollution prevention opportunity assessments on weapons systems before they go online, avoiding unnecessary generation of wastestreams.
- Materials recycled include paper products, corrugated cardboard, phone books, plastics, tin/steel cans, and scrap tires.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Pantex Plant may be obtained by contacting:

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Pinellas Plant

Pinellas Plant – 1995

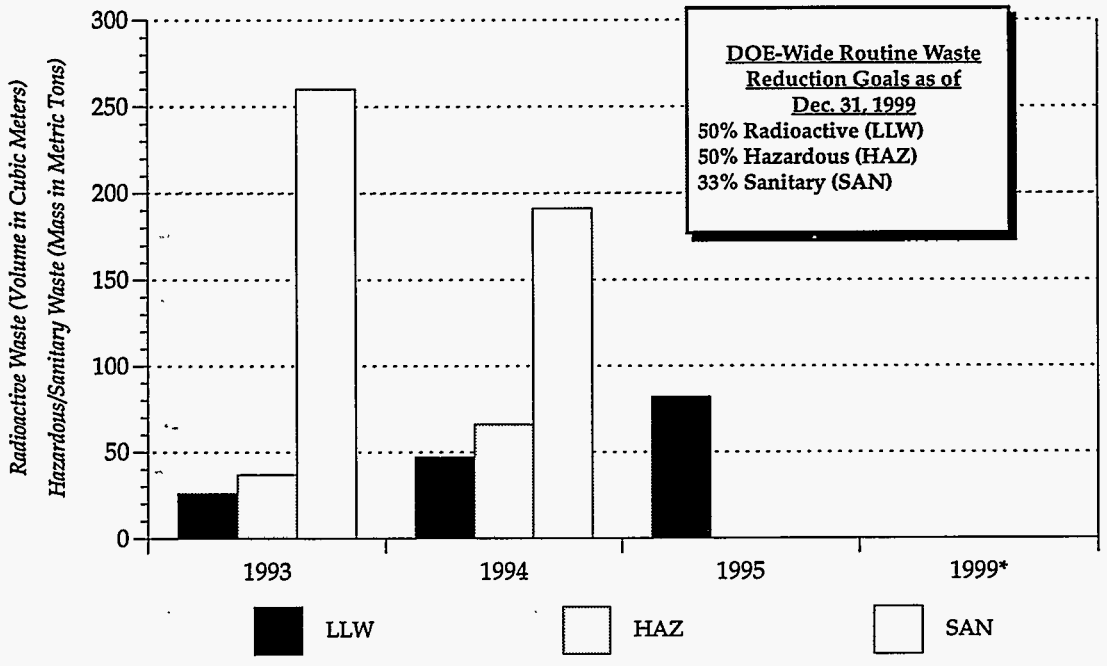
Location:	**Largo, Florida**
Site Size:	**99.2 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**29**
Prime Contractor Employees:	**643**

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 they 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 will cease by September 1997 except for waste generated by environmental restoration activities.*

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- The Pinellas Plant continued its effort to minimize waste during the process of closing the facility. All wastestream quantities increased in 1995 due to efforts to eliminate hazardous materials from the building and surrounding land as quickly as possible.
- Walls, floors, and ceilings at the Pinellas Plant were cleaned to remove tritium contamination from surfaces so that these materials would not have to be removed and disposed as low-level radioactive waste.
- The Plant and its equipment were cleaned to reduce Resource Conservation and Recovery Act regulated hazardous chemical contamination.
- Compactible low-level waste materials were placed in empty spaces in low-level waste containers used for uncleanable materials and equipment. This enabled efficient use of storage space, and eliminated the compacting process.

Materials Recycled by the Pinellas Plant in 1995

Recycled Material	Pinellas Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	180	22,075
Paper	55	9,354
Other Materials*	2	50,220
GRAND TOTAL	*237*	*83,257*

* *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.*

- Used chemicals were returned to the vendor for reuse when possible.
- Usable but unwanted materials were listed and made available to interested local public organizations for reuse, reducing sanitary waste.
- Waste generation at the Pinellas Plant officially ended on September 30, 1994. As various areas of the Plant are cleaned out, excess office supplies, tools, and other equipment are identified. If these items are usable, they are listed by the free Office Supply Reuse program. Purchasing costs, waste disposal costs, and the sanitary wastestream have been reduced as a result of this initiative.
- The Pinellas Plant successfully completed the third year of its site-wide recycling program in 1995. Significant quantities of equipment and materials were recycled or reused, including scrap metal, paper, aluminum cans, plastic, glass, toner cartridges, and computer diskettes. The recycling program will be maintained until DOE completes cleanout of the Pinellas Plant.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Pinellas Plant may be obtained by contacting:

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Albuquerque, NM 87185-5400
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Pittsburgh Energy Technology Center

Pittsburgh Energy Technology Center – 1995

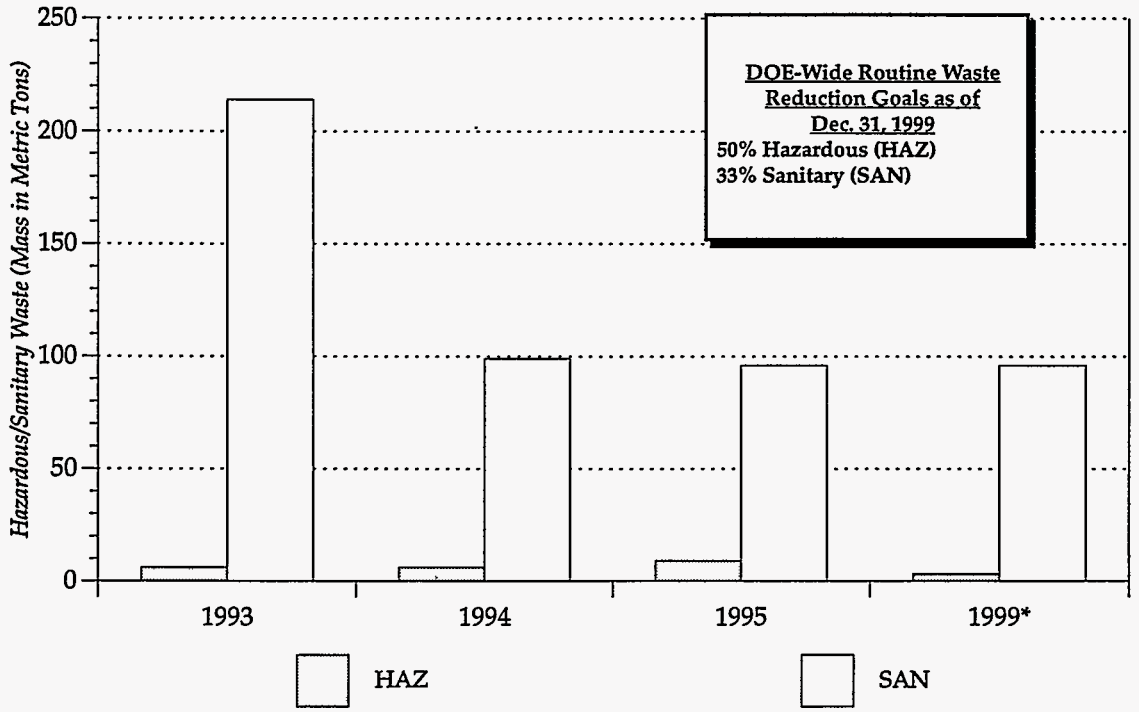
Location:	**Pittsburgh, Pennsylvania**
Site Size:	**59 Acres**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Fossil Energy**
DOE Employees:	**269**
Prime Contractor Employees:	**253**

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)

1995 Pollution Prevention Activities and Accomplishments

- A hazardous waste minimization plan has been prepared by the Pittsburgh Energy Technology Center, which includes source substitution, process modification, and recycling to reduce the amount of waste generated by operations.
- The Pittsburgh Energy Technology Center plans to reduce waste generation by eliminating and/or minimizing the amount of hazardous materials used at the start of projects. Through review of chemical usage and project operations, waste reduction will eventually become an integral part of facility planning.
- The generation of Resource Conservation Recovery Act regulated hazardous waste is being minimized by monitoring the purchases of hazardous chemicals and by decreasing the onsite inventory of hazardous materials through use of existing inventory when feasible.
- Pollution prevention opportunity assessments are being conducted on research and development projects and site operations.
- The Pittsburgh Energy Technology Center promotes an incentive program for employee suggestions.
- The Hydrotreater Facility is not a large generator of waste material at the Pittsburgh Energy Technology Center. There is a relatively large usage of methyl chloride in the laboratory associated with the facility, and a method of solvent recovery is being studied.
- Materials recycled include office paper, aluminum cans, corrugated paper, and leaf waste. As a result of recycling, the amount of sanitary waste sent to the landfill has been reduced by approximately 30 percent.

Materials Recycled by the Pittsburgh Energy Technology Center in 1995

Recycled Material	Pittsburgh Energy Technology Center *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	2	1,608
Metals	29	22,075
Paper	24	9,354
Other Materials*	2	50,220
GRAND TOTAL	*57*	*83,257*

* *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.*

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Pittsburgh Energy Technology Center may be obtained by contacting:

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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 – 1995

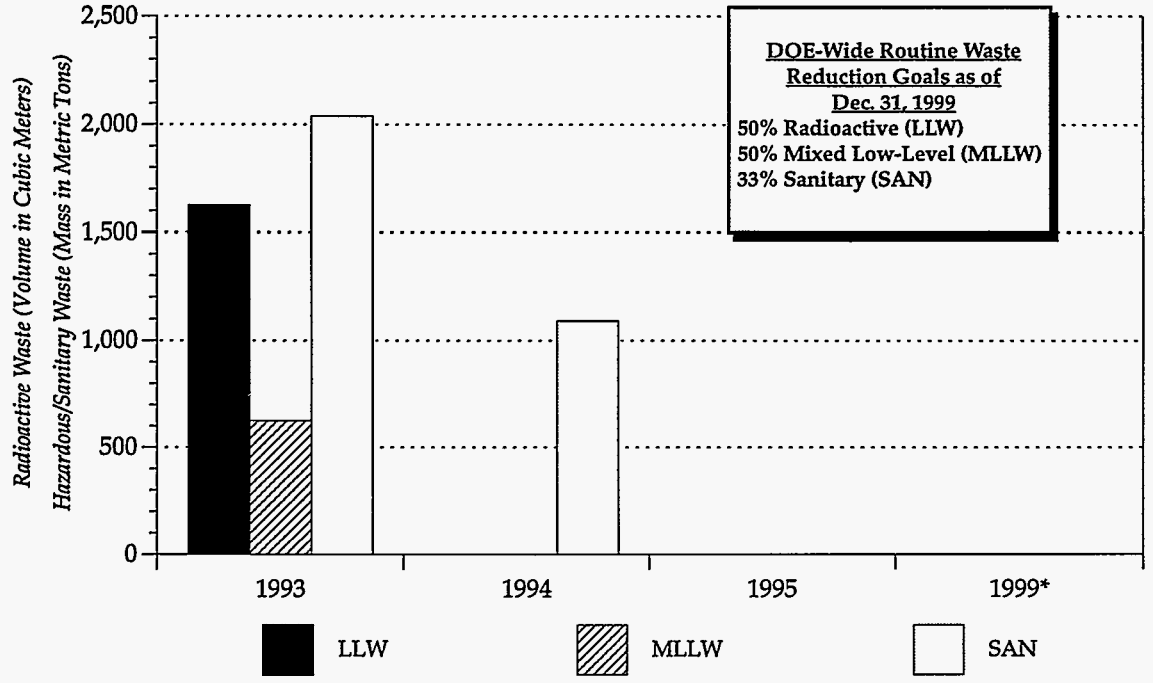
Location:	**Piketon, Ohio**
Site Size:	**3,714 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**14**
Prime Contractor Employees:	**210**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Portsmouth Gaseous Diffusion Plant began a detailed radiological characterization of its facilities to determine the extent and amount of contamination. The next step is to decrease the number of radiological areas at the site, and to decrease costs and radiological waste/material produced as the result of remediation activities. By the end of calendar year 1995, over 843,000 square feet of facility space had been characterized.
- In 1995, the Portsmouth Gaseous Diffusion Plant released spent fluorescent light bulbs from its inventory of mixed waste to an approved recycling facility. As of December 31, 1995, 41,966 bulbs weighing approximately 29,143 pounds were recycled.
- The Pollution Prevention Program purchased software for a hazardous materials tracking system to monitor hazardous chemical product purchases for reporting, safety, and pollution prevention purposes.
- Environmental restoration projects at the Portsmouth Gaseous Diffusion Plant enabled a reduction in waste generation in 1995.
- The Portsmouth Gaseous Diffusion Plant implemented a program to recognize employee pollution prevention and waste minimization efforts and accomplishments through articles written in the Plant's newsletter and other publications.

Materials Recycled by the Portsmouth Gaseous Diffusion Plant in 1995

Recycled Material	Portsmouth Gaseous Diffusion Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	2	22,075
Paper	50	9,354
Other Materials*	13	50,220
GRAND TOTAL	*65*	*83,257*

* *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 Portsmouth Gaseous Diffusion Plant sponsored and participated in the ENVIRONMENTAL FAIR, a local public outreach activity designed to teach sixth grade children about the environment through hands-on activities and demonstrations.
- The Portsmouth Gaseous Diffusion Plant, in conjunction with the other Oak Ridge Reservation sites, implemented a pilot scale charge back program to tax waste generators a set fee based upon the amount of waste generated. This program encourages generators to pursue waste minimization activities, and if the generators choose not to, the collected taxes benefit pollution prevention activities.
- Materials recycled include office paper, cardboard, and aluminum cans.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Portsmouth Gaseous Diffusion Plant may be obtained by contacting:

Karen Catlett
U.S. Department of Energy Operations Office, Oak Ridge
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Princeton Plasma Physics Laboratory

Princeton Plasma Physics Laboratory – 1995

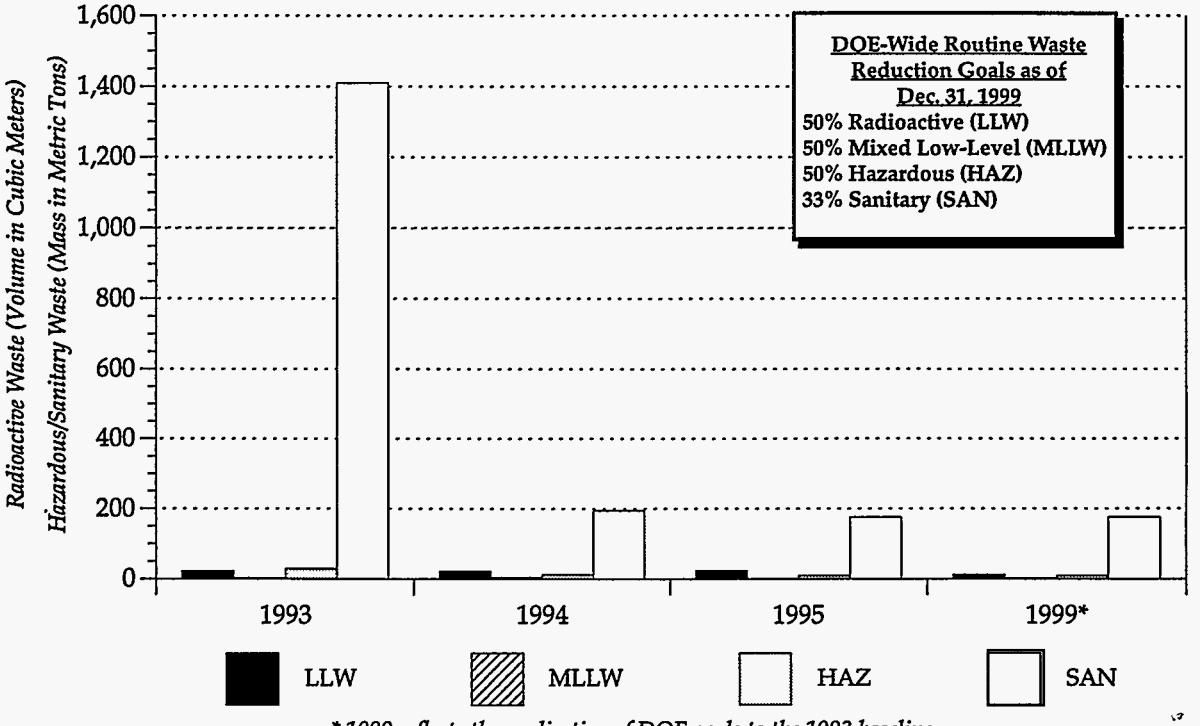
Location:	**Princeton, New Jersey**
Site Size:	**72 Acres**
Operations Office:	**Chicago**
Lead Program Office:	**Energy Research**
DOE Employees:	**17**
Prime Contractor Employees:	**542**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Princeton Plasma Physics Laboratory continues to recycle most of its waste tritium by sending it to the Savannah River Site. In 1995, a Tritium Purification System was installed at the Princeton Plasma Physics Laboratory to recover tritium used in the Tokamak Fusion Test Reactor. Twenty-four shipping containers with 1,200 cubic feet of tritium waste was recycled, and 235,196 curies of tritium were recovered, saving $843,600.
- The photo lab installed additional silver recovery cartridges to reduce low-level waste discharge into the sanitary sewer.
- Recycled 175 tons of nonhazardous, contaminated soil, and 26 tons of concrete for use as asphaltic paving material, avoiding $40,882 in landfill charges.
- The Princeton Plasma Physics Laboratory installed dedicated, low-flow purging and sampling pumps in all 35 monitoring wells, eliminating approximately 20,000 pounds of Resource Conservation Recovery Act regulated hazardous waste. Groundwater monitoring waste was reduced by 93 percent. The cost of the installation was $50,000, and in the first quarter of operation, $30,000 was saved.
- Approximately 10,000 gallons of lubricating and machinery oils were recycled.
- Over 4,000 pounds of hazardous materials, including batteries, were recycled.
- Laundering of anti-contamination clothing prevented approximately 250 bags of low-level radioactive waste from being generated.
- Due to continuation of the Sanitary Waste Evaluation, sanitary waste generation decreased 10 percent in 1995, and the amount of recyclable paper contained in trash decreased 22 percent.

Materials Recycled by the Princeton Plasma Physics Laboratory in 1995

Recycled Material	Princeton Plasma Physics Laboratory *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	5	1,608
Metals	108	22,075
Paper	105	9,354
Other Materials*	184	50,220
GRAND TOTAL	*402*	*83,257*

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

- Oil and diesel fuel underground storage tanks were replaced by above ground storage tanks. Five underground storage tanks were removed, and one was closed in place by grouting, under a state approved underground storage tank closure plan. Leaks were discovered in several tanks and associated piping, which necessitated the removal of the boiler room floor and the contaminated soil beneath the floor.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Princeton Plasma Physics Laboratory may be obtained by contacting:

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Scott B. Larson
Princeton Plasma Physics Laboratory
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609-243-3387, FAX 609-243-3366

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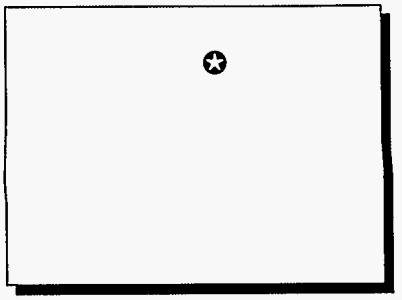
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Rocky Flats Environmental Technology Site



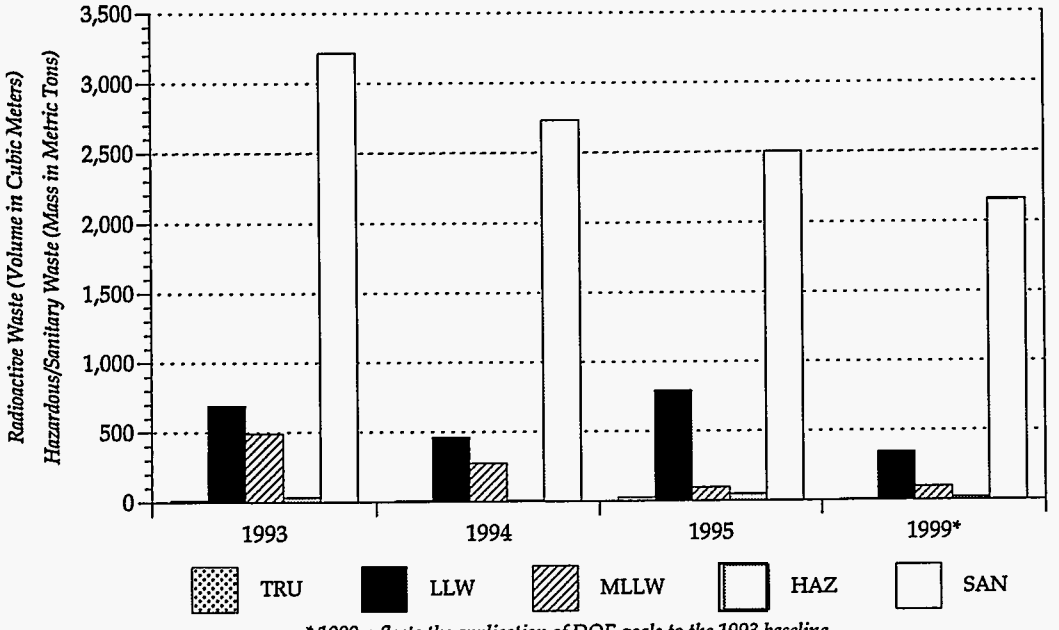
Rocky Flats Environmental Technology Site – 1995	
Location:	**Golden, Colorado**
Site Size:	**6,550 Acres**
Operations Office:	**Rocky Flats**
Lead Program Office:	**Environmental Management**
DOE Employees:	**398**
Prime Contractor Employees:	**2,540**

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



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)

1995 Pollution Prevention Activities and Accomplishments

- A pollution prevention opportunity assessment was performed to identify an alternative approach to handling laundry wastewater generated in Building 566. This approach was to eliminate the current processing requirement on rinse water (50 percent of the total waste volume), and to treat only the wash water at the source of generation. The assessment recommendation was to install a small evaporator, and to change the system piping, enabling treatment of the wash water at the source of generation. Implementation of this approach would result in an annual cost savings of approximately $800,000.
- A pollution prevention opportunity assessment was performed to identify opportunities to minimize the quantity of acid used at the site. A team analyzed the processes associated with Operable Unit 1 by gathering information during a tour and discussion, and as a result, six pollution prevention opportunities were formulated. Assuming a waste generation reduction of one-third, a cost saving of $50,000 per year is estimated.
- As Building 566's Radiological Material Management Area (RMMA) is reduced, waste minimization benefits expand. For example, the laundry is expected to generate approximately 64 cubic yards of low-level waste during the next year. By shrinking the RMMA, only eight cubic yards of low-level waste will be generated, and 56 cubic yards of waste can be reclassified as nonhazardous. The estimated first year cost saving is $41,000.

Materials Recycled by the Rocky Flats Environmental Technology Site in 1995

Recycled Material	Rocky Flats Environmental Technology Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	10	1,608
Metals	151	22,075
Paper	417	9,354
Other Materials*	91	50,220
GRAND TOTAL	*669*	*83,257*

* *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.*

- Options implemented at the site to prevent or reduce aqueous waste generation included (1) use of water-saving dishwashers instead of the manual washing of lab equipment, (2) modification of laboratory sink faucets to restrict flow, (3) reuse of cleaning rinse water within the laboratory for equipment washing, (4) onsite recycling of grey water generated by sink usage, and (5) reuse of waste acid on site.
- Freon cleaning was replaced by sonic cleaning to reduce the generation of low-level mixed waste.
- The Vehicle Maintenance department recycled used motor oils and oil/fuel filters, and filtered and reused freon and antifreeze.

This fact sheet contains information provided by the site. 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 #163-52A
Golden, CO 80402
303-966-7252, FAX 303-966-4728

Randy Leitner
Rocky Flats Environmental Technology Site
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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Sandia National Laboratories/California

Sandia National Laboratories/California – 1995

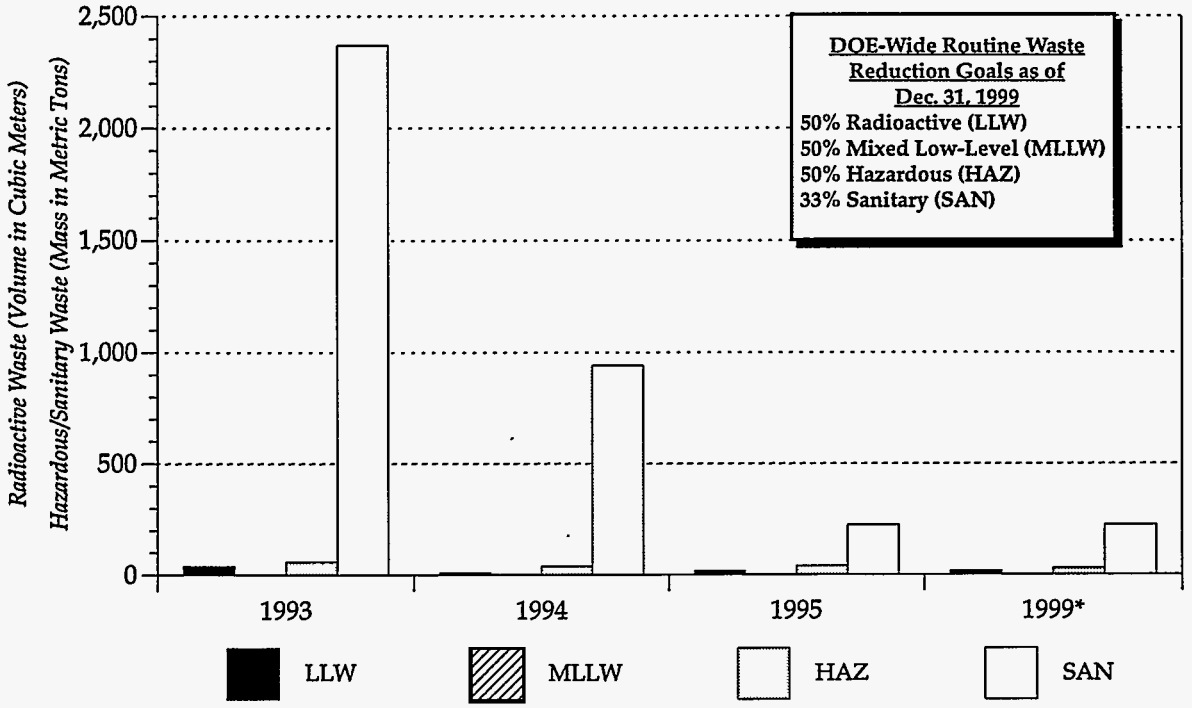
Location:	**Livermore, California**
Site Size:	**413 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**0**
Prime Contractor Employees:	**980**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Sandia National Laboratories/California recycled 3,000 pounds of weapon components and hardware.
- Reused 140 tons of excess propellants and explosives for sled tracks, creating shock environments, and for research and development projects (e.g., mining explosives, boiler fuel supplements, and animal feed supplements).
- Distributed 130 computers to schools for reuse.
- Traditional photographic processing equipment was replaced by a digital system, reducing hazardous/non-biodegradable waste by 50 percent.
- The Diana Laser Laboratory converted to using only Coumarin 440 Dye in the laser's operations, reducing waste generation from 310 kilograms in 1994 to one kilogram in 1995.
- Wastewater generated by the Electrodeposition Laboratory was collected and recycled through ion exchange columns.

Materials Recycled by the Sandia National Laboratories/California in 1995

Recycled Material	Sandia National Laboratories/CA *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	7	1,608
Metals	68	22,075
Paper	45	9,354
Other Materials*	12	50,220
GRAND TOTAL	*132*	*83,257*

* *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.*

- Cryocyled propellant was reused as water gel explosives for mining and quarrying, booster charges for explosive initiation, and for sporting powders.
- The chlorofluorocarbon chiller on building 913W was replaced by a non-chlorofluorocarbon, high efficiency chiller.
- Lead-acid batteries were replaced by rechargeable batteries.
- Materials recycled include paper, toner cartridges, scrap metal, batteries, engine oil, precious metals, oil filters, coolant, fluorescent light tubes, aluminum cans, tires, and glass.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Sandia National Laboratories/California 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

Sally Raubfogel
Sandia National Laboratories/California
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Livermore, CA 94551-0969
510-294-2341, FAX 510-294-3418

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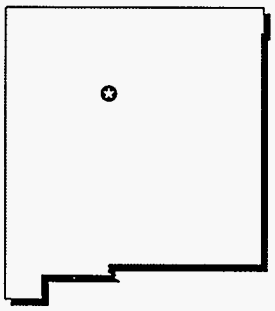
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Sandia National Laboratories/New Mexico



Sandia National Laboratories/New Mexico – 1995

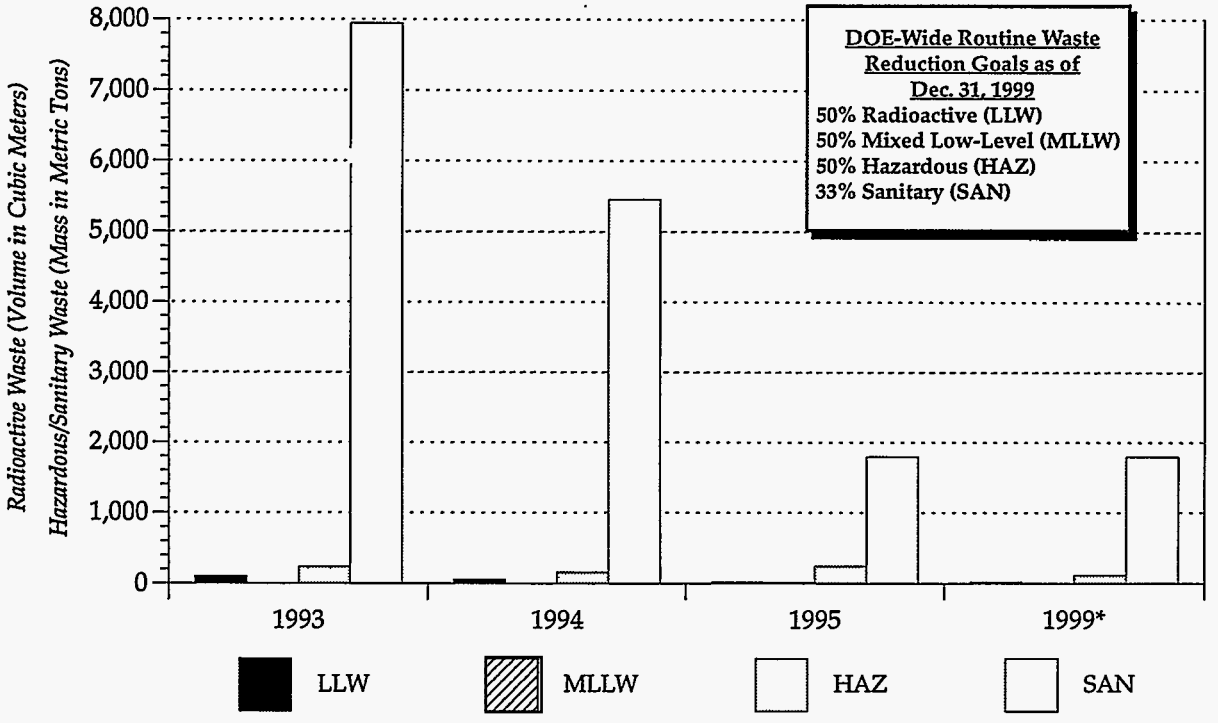
Location:	**Albuquerque, New Mexico**
Site Size:	**2,820 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Defense Programs**
DOE Employees:	**0**
Prime Contractor Employees:	**8,076**

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)

1995 Pollution Prevention Activities and Accomplishments

- Steel drums were replaced by poly drums, eliminating disposal of 1,600 pounds of empty drums.
- Soil sample collection equipment was changed from an auger to a geoprobe, eliminating 1,000 kilograms of soil waste per year.
- Containers used to store and transport chemicals used in water treatment processes were reused, eliminating 750 pounds of hazardous waste.
- Wrangler bags for soils were reused, eliminating 500 pounds of waste.
- A Xerox Docutech publishing system was implemented, eliminating 345 kilograms of hazardous waste.
- Steel cutting shoes were repaired, eliminating disposal of 150 damaged shoes per year.

Materials Recycled by the Sandia National Laboratories/New Mexico in 1995

Recycled Material	Sandia National Laboratories/NM *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	71	1,608
Metals	600	22,075
Paper	483	9,354
Other Materials*	75	50,220
GRAND TOTAL	*1,229*	*83,257*

* *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.*

- Groundwater purging techniques were modified, saving approximately 100 gallons per sampling event.
- Sample liners were used as soil sample containers, eliminating the use of jars, and eliminating 100 pounds of liner waste per year.
- Hydrocarbon analysis using halogenated solvents for extraction was replaced by thermal extraction, eliminating eight liters of solvent per year.
- A Safety Kleen parts washer using petroleum naphtha solvent was replaced by a microbial parts washer.
- Traditional photography equipment was replaced by a digital camera, printer, and television monitor.
- Polychlorinated biphenyl ballasts were recycled and replaced by non-polychlorinated biphenyl ballasts.
- A recirculating bath was replaced by a smaller bath with nitrogen bubbler.
- Laser waste discharge was eliminated by installing a closed loop cycle chiller.
- Used filters were crushed to remove oil, and the metal filter cases were recycled.
- Materials recycled include used oil, lead/acid batteries, aluminum, brass, copper, titanium, magnesium, titanium, lead, paper, cardboard, aluminum cans, polychlorinated biphenyl ballasts, and fluorescent bulbs.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Sandia National Laboratories/New Mexico 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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Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Savannah River Site

Savannah River Site – 1995

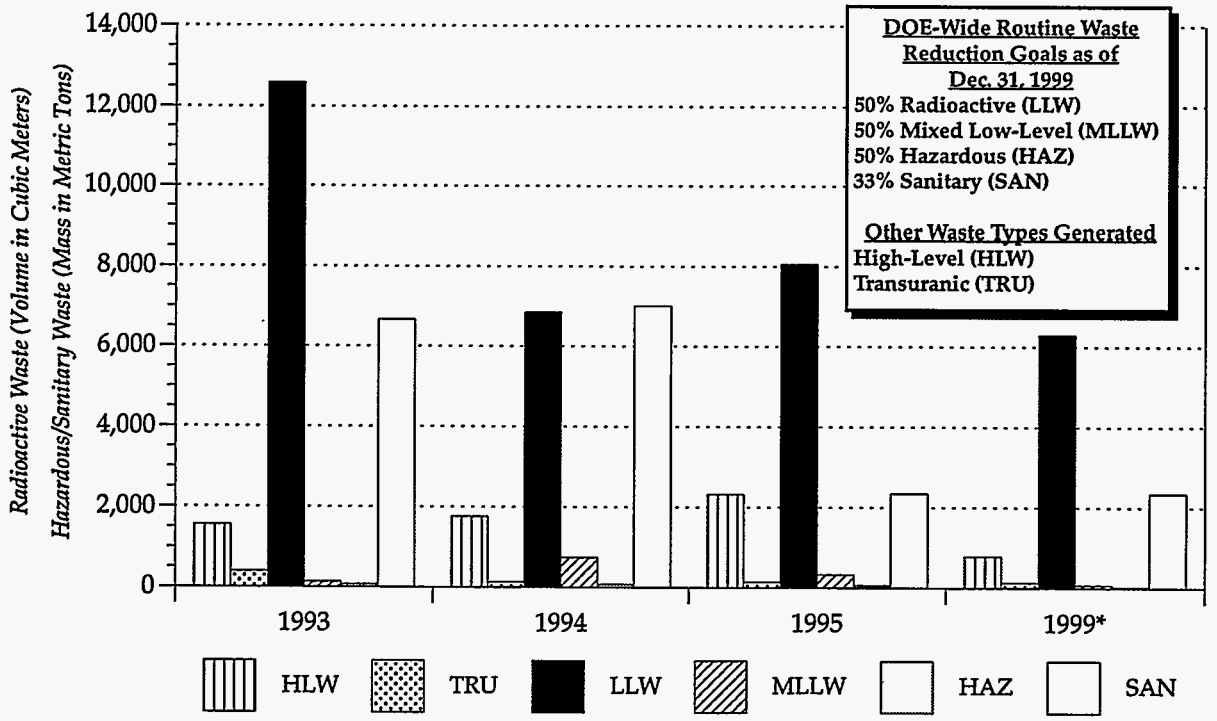
Location:	**Aiken, South Carolina**
Site Size:	**198,334 Acres**
Operations Office:	**Savannah River**
Lead Program Office:	**Environmental Management**
DOE Employees:	**591**
Prime Contractor Employees:	**15,907**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Savannah River Site established a Chemical Commodities Management Center (CCMC), responsible for chemical procurements and ownership of approximately 1,300 chemicals. Redistribution of chemicals through the CCMC saved more than $250,000 in 1995.
- A 60-ton crane was decontaminated and released to an offsite vendor for salvage, avoiding approximately 150 cubic meters of low-level waste.
- Filter compartments are cut in half, and the internal parts are removed and placed in another container. The gutted filter halves are packaged with low-level waste and discarded, eliminating 111 cubic meters of low-level waste.
- A temporary fabrication shop was set up to pre cut insulation and jacket in a clean area, avoiding the generation of 26 cubic meters of low-level waste.
- Clean metal was separated from contaminated metal and shipped offsite for reuse, reducing low-level waste by 19 cubic meters.
- Equipment was surveyed and released by Rad Con to the Excess and Salvage departments, avoiding 15 cubic meters of low-level waste.
- Construction personnel washed brushes with paint thinner, which was then mixed with concentrated paint and reused, eliminating 1.3 cubic meters of mixed low-level waste.
- Glovebox equipment and contaminated surfaces were surveyed to verify waste levels, avoiding 0.2 cubic meters of transuranic waste.

Materials Recycled by the Savannah River Site in 1995

Recycled Material	Savannah River Site *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	60	1,608
Metals	2,073	22,075
Paper	915	9,354
Other Materials*	34	50,220
GRAND TOTAL	*3,082*	*83,257*

* *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 Savannah River Site recycled more than 3,000 metric tons of material in 1995, including 3,147 gallons of antifreeze (11.9 metric tons), 707 gallons of paint solvents (2.7 metric tons), 1,403 gallons of silver fixative solution (5.3 metric tons), 3.1 metric tons of 55-gallon drums (685 drums), 2,354 drums (5.4 metric tons), furniture (282.2 metric tons), miscellaneous electrical items (25.8 metric tons), aluminum, white goods, scrap metals, lead/acid batteries, waste tires, metal and plastic drums, toner cartridges, office paper, and cardboard.

This fact sheet contains information provided by the site. 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 – 1995

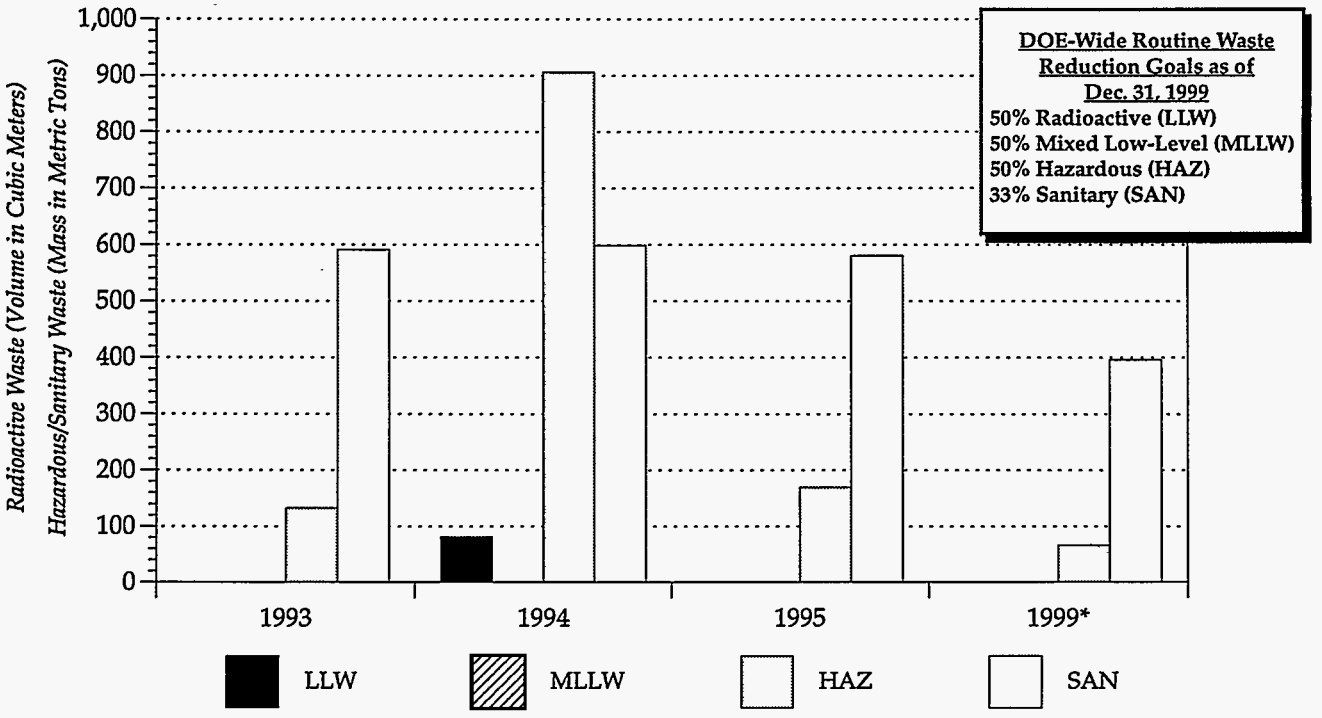
Location:	**Stanford, California**
Site Size:	**426 Acres**
Operations Office:	**Oakland**
Lead Program Office:	**Energy Research**
DOE Employees:	**8**
Prime Contractor Employees:	**1,515**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Stanford Linear Accelerator Center sent 907 metric tons of concrete block to the Menlo Park Fire Department and the National Rescue Facility for training exercises.
- The Stanford Synchrotron Radiation Laboratory converted its cleaning operations to replace 1,1,1-trichloroethane with a petroleum distillate solvent.
- Stanford Linear Accelerator Center Klystron operations replaced freon and 1,1,1-trichloroethane usage with no-clean and aqueous cleaning alternatives.
- The plating shop has reduced its usage of rinse water, which has reduced its use of chemicals to treat the rinse water for precipitation of metal contaminants.
- Careful monitoring of plating bath integrity has increased bath life and has reduced disposal.
- A Waste Minimization/Pollution Prevention Plan was completed to comply with California's Hazardous Waste Source Reduction and Management Review Act.
- Waste tracking capability was improved to better identify sources of hazardous waste.
- Employees were provided with hazardous material and waste management training and updates.
- Five recycling information displays were updated to provide information on household hazardous waste handling and nonhazardous waste recycling.

Materials Recycled by the Stanford Linear Accelerator Center in 1995

Recycled Material	Stanford Linear Accelerator Center *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	2	1,608
Metals	527	22,075
Paper	63	9,354
Other Materials*	93	50,220
GRAND TOTAL	*685*	*83,257*

* *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.*

- Three presentations on hazardous waste minimization and pollution prevention were given to hazardous material/waste coordinators, waste management, and safety staff.
- An Environmental Safety and Health Manual Chapter on Waste Minimization and Pollution Prevention was published in February 1995.
- Materials recycled include office paper, cardboard, beverage containers, oil, tires, toner cartridges, batteries, scrap metal, brass, wire, and garden waste, totaling 156 metric tons (excluding scrap metal and 907 tons of one-time concrete block construction waste).

This fact sheet contains information provided by the site. 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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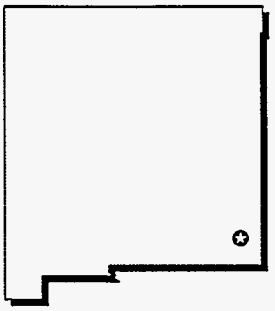
Office of Environmental Management

Waste Generation and Pollution Prevention Progress

Fact Sheet

Waste Isolation Pilot Plant



Waste Isolation Pilot Plant – 1995

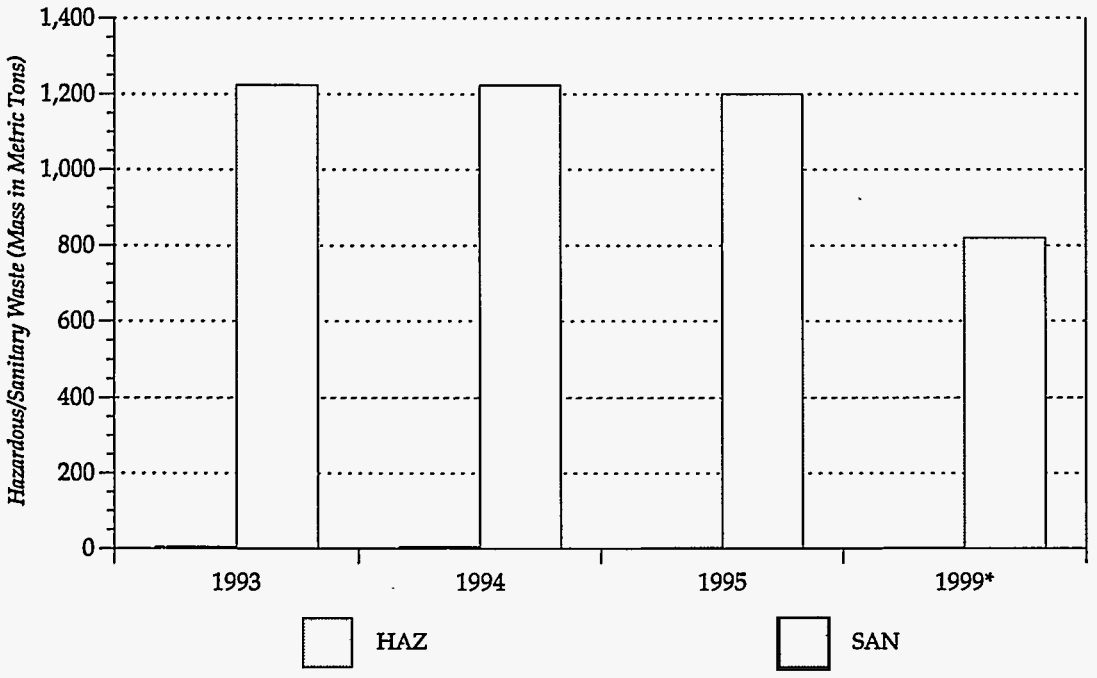
Location:	**Carlsbad, New Mexico**
Site Size:	**25 Acres**
Operations Office:	**Albuquerque**
Lead Program Office:	**Environmental Management**
DOE Employees:	**59**
Prime Contractor Employees:	**643**

Facility Mission

The Waste Isolation Pilot Plant is a research and development facility. It is designed to demonstrate the safe transport, handling, and disposal of defense-generated radioactive transuranic waste.

(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% Hazardous (HAZ)
33% Sanitary (SAN)

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

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- The Waste Isolation Pilot Plant recharged 260 printer toner cartridges, saving $15,000.
- In 1995, the aerosol puncturing program was expanded to include underground operations. Aerosol cans are punctured and emptied, reducing the amount of hazardous waste generated, saving approximately $6,800.
- In 1995, the only hazardous waste generated at the Waste Isolation Pilot Plant was Resource Conservation and Recovery Act regulated. This wastestream was 97 percent cleanup/stabilization waste, consisting of naturally occurring brine waters that were contaminated through contact with lead bearing materials.
- During 1995, the Waste Isolation Pilot Plant continued many of its successful waste minimization efforts, including the recycling of antifreeze (5,854 pounds), Safety Kleen parts cleaning solvent (1,078 pounds), paper (50 tons), toner cartridges (260), aluminum cans, used oil, batteries, and scrap metal.
- The Waste Isolation Pilot Plant's Waste Minimization and Pollution Prevention Awareness Program was designed to eliminate or minimize pollutant releases to environmental media and from site operations. Goals are accomplished through source reduction, material substitution, and recycling.
- Waste Isolation Pilot Plant employees are encouraged to participate in the Process Improvement Program by submitting waste minimization ideas.
- The Waste Minimization Committee sponsored two "Waste-In-Place" workshops for area educators. Thirty teachers from the Artesia and Carlsbad, New Mexico school districts participated in a one day workshop that enhanced awareness of environmental issues such as litter control, recycling, and waste prevention.
- In 1995, the Waste Isolation Pilot Plant hosted the Seventh Semiannual DOE Defense Programs Technology Workshop. The focus of the three day workshop was "Hands-on Pollution Prevention." Approximately 90 people from various DOE sites participated in two days of benchmarking pollution prevention processes, and took a one day tour of the site.

Materials Recycled by the Waste Isolation Pilot Plant in 1995

Recycled Material	Waste Isolation Pilot Plant *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	16	1,608
Metals	594	22,075
Paper	50	9,354
Other Materials*	3	50,220
GRAND TOTAL	*663*	*83,257*

* *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.*

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Waste Isolation Pilot Plant 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

Miriam Whatley
Waste Isolation Pilot Plant
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Carlsbad, NM 88221
505-234-8296, FAX 505-885-4562

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Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Weldon Spring Site Remedial Action Project

Weldon Spring Site Remedial Action Project – 1995

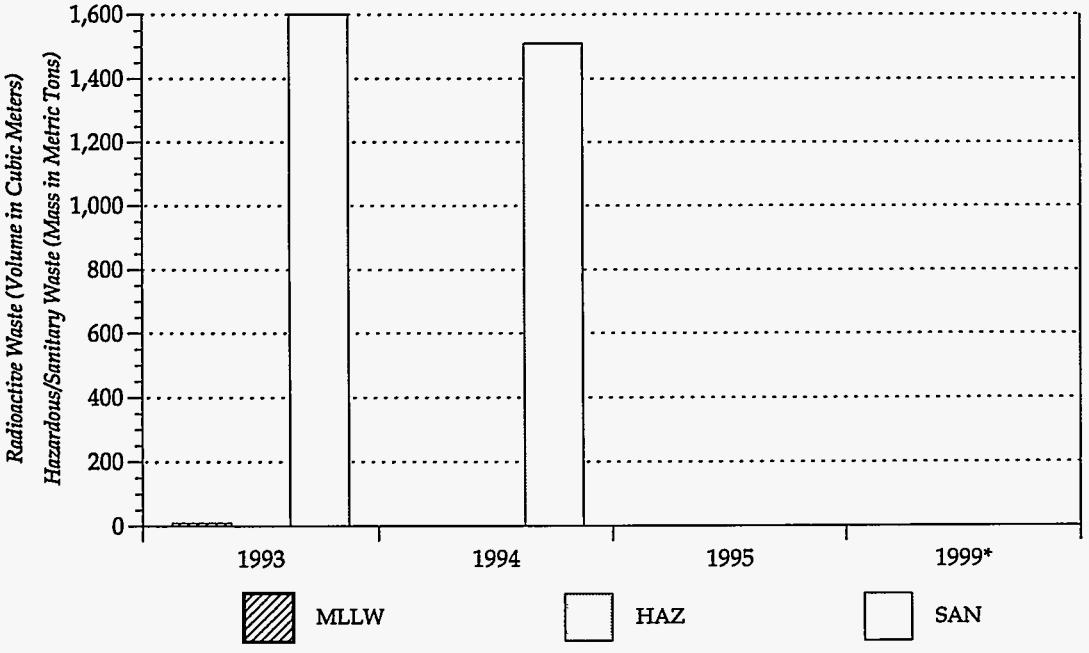
Location:	**St. Charles, Missouri**
Site Size:	**230 Acres**
Operations Office:	**Oak Ridge**
Lead Program Office:	**Environmental Management**
DOE Employees:	**13**
Prime Contractor Employees:	**381**

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.*

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

(continued from page 1)

1995 Pollution Prevention Activities and Accomplishments

- Approximately 1,500 linear feet of railroad track was released to the St. Louis Museum of Transportation for reuse.
- Unused excess lubricants, including 310 gallons of oil, were transferred from one subcontractor to another. Because the lubricant was stored in a radiological material management area, the material could not be restocked.
- Approximately eight lead-acid batteries were sent to the manufacturer for recycling.
- Filtercake boxes are being reused at water treatment plants onsite. The filtercake is stockpiled onsite, and the boxes are decontaminated so they can be reused for storage.
- Various organic materials have been recycled or composted.
- Wood items, such as lumber from building demolition activities, were recycled and reused as stanchions, storage boxes, and compost.

Materials Recycled by the Weldon Spring Site Remedial Action Project in 1995

Recycled Material	Weldon Spring Site Remedial Action Project *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	not tracked	1,608
Metals	not tracked	22,075
Paper	9	9,354
Other Materials*	not tracked	50,220
GRAND TOTAL	*9*	*83,257*

* *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.*

- Straw bales that are no longer capable of providing efficient erosion control are used as mulch for the protection of newly seeded areas.
- Used personal protective equipment was compacted into 55-gallon containers for onsite storage.
- Packaging was removed from products to the extent practicable before the products entered the radiological material management area, reducing the amount of radioactivity contaminated packaging that must be disposed.
- A surplus material inventory was compiled for the reuse of materials and equipment to eliminate purchase of a duplicate item, or contaminating a new product.
- Polychlorinated biphenyl contaminated tools were segregated and stored, enabling reuse for similar field work.
- Materials recycled include reusable cotton overalls, aluminum cans, and lead/acid batteries.

This fact sheet contains information provided by the site. 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
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314-441-8086, FAX 314-447-0739

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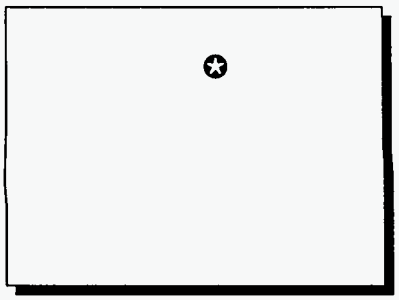
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

Western Area Power Administration



Western Area Power Administration – 1995

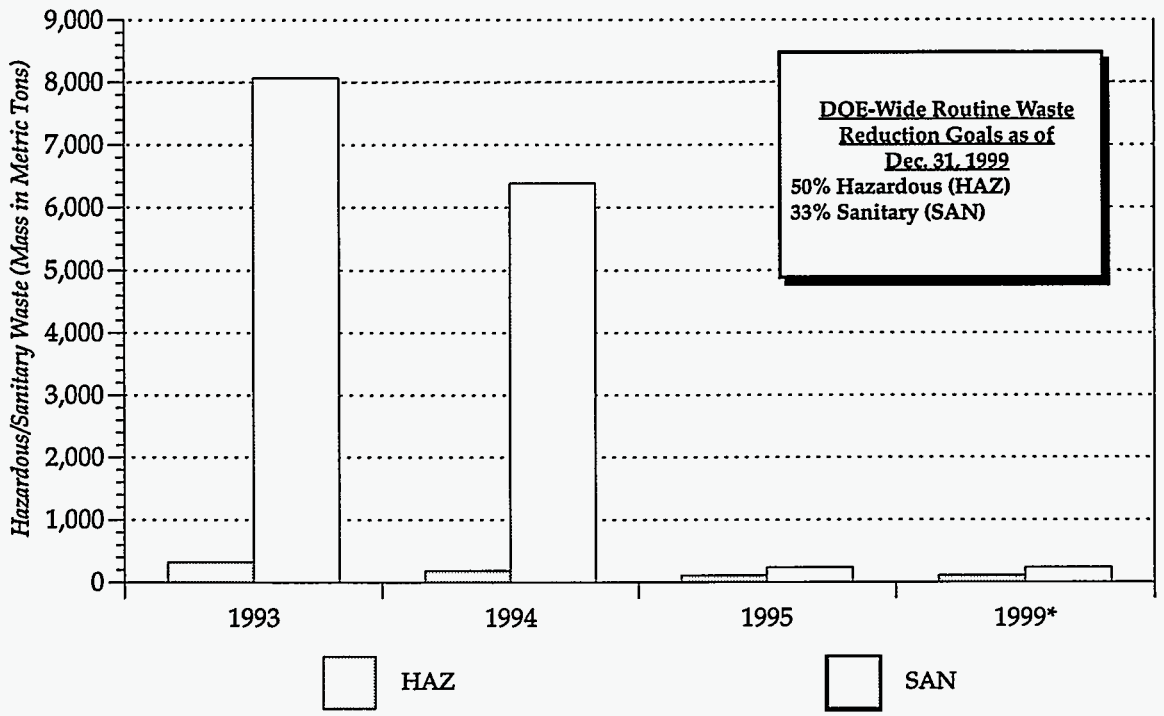
Location:	**Golden, Colorado**
Site Size:	**n/a**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Power Marketing Administration**
DOE Employees:	**1,394**
Prime Contractor Employees:	**0**

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)

1995 Pollution Prevention Activities and Accomplishments

- The Western Area Power Administration reduced the amount of contaminants, wastes, and other regulated materials requiring disposal through source reduction and recycling programs.
- The Office of Environment staff attended waste minimization/pollution prevention conferences, as appropriate, and received in-house communications on implementation of waste minimization principles such as proper handling, classification, segregation, labeling, and DOE and EPA requirements.
- The Western Area Power Administration has implemented activities to increase employee awareness of and participation in its waste minimization program, including a formal Waste Minimization Assessment Team with core representatives from the Regional Offices, informal training and program status at staff meetings and conferences calls, and informational articles in employee newsletters.

Materials Recycled by the Western Area Power Administration in 1995

Recycled Material	Western Area Power Administration *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	13	1,608
Metals	835	22,075
Paper	67	9,354
Other Materials*	860	50,220
GRAND TOTAL	*1,775*	*83,257*

* *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.*

- Employees contributing to waste minimization efforts may be recognized through the standard agency award system, which honors employees in the following categories: On-the-Spot, Gold Star, Special Act, and Appreciation. The Western Area Power Administration also has "Suggestion Awards" which provide the opportunity for employees to express their concerns, problems, and/or suggestions to improve safety, health, and/or productivity.
- The Waste Minimization Assessment Team evaluated opportunities for tracking, reporting, and planning waste minimization activities.
- The Procurement Office evaluated opportunities for tracking and reporting the purchases of recycled materials.
- The Western Area Power Administration maintains records of all agency hazardous and toxic waste disposals.
- Procedures were developed for herbicide purchase, use, and storage to reduce risks to facilities and rights-of-way.

This fact sheet contains information provided by the site. Additional information on the Pollution Prevention Program at the Western Area Power Administration may be obtained by contacting:

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

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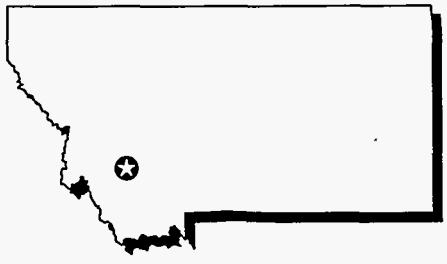
Waste Generation and Pollution Prevention Progress Fact Sheet

Western Environmental Technology Office



Western Environmental Technology Office – 1995

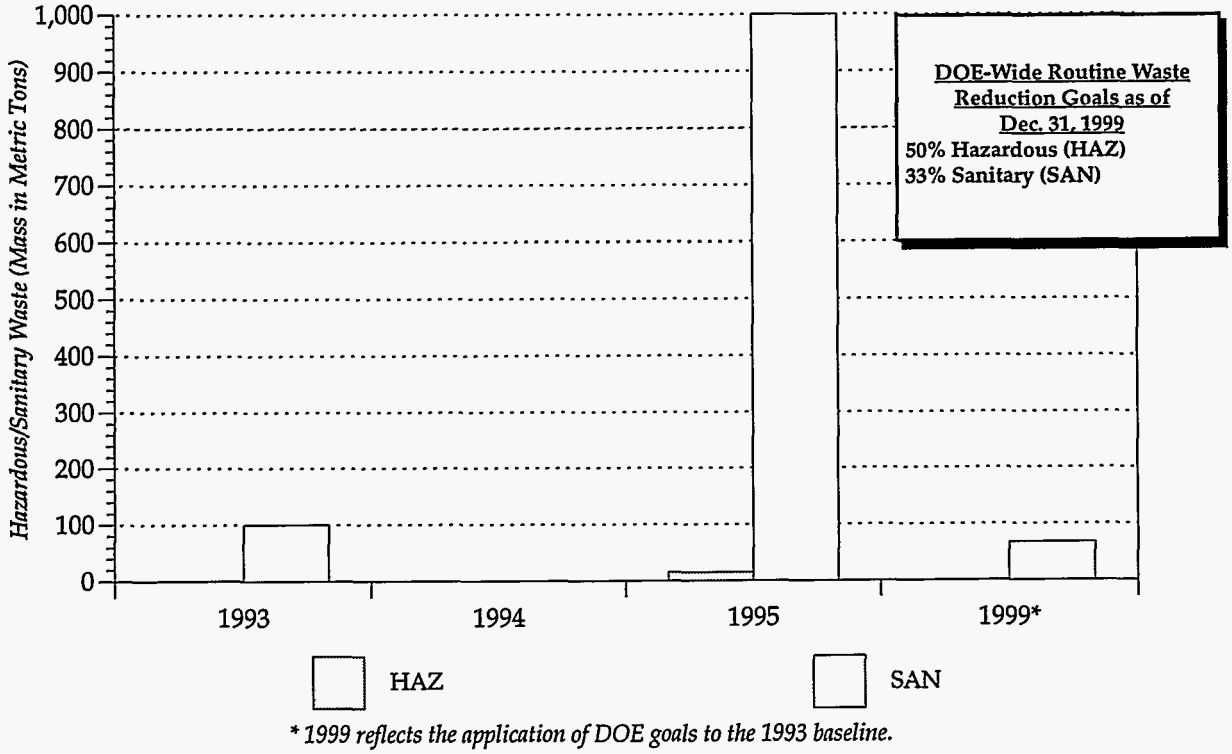
Location:	**Butte, Montana**
Site Size:	**53 Acres**
Operations Office:	**DOE Headquarters**
Lead Program Office:	**Fossil Energy**
DOE Employees:	**2**
Prime Contractor Employees:	**190**

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 mine water 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)

1995 Pollution Prevention Activities and Accomplishments

- Approximately 800,000 gallons (3,028 metric tons) of wastewater from the East evaporation pond was discharged to the sanitary sewer.
- Mine wastewater is imported to the Western Environmental Technology Office for use as feedstock in the processes demonstrated by the Resource Recovery Program. The water is regulated by the State of Montana under Comprehensive Environmental Response, Compensation, and Liability Act authorization. Approximately 10,000 gallons (38 metric tons) of mine wastewater was processed and discharged to the sanitary sewer. Approximately 11,000 gallons (42 metric tons) of mine wastewater were in storage at the facility at the end of 1995.
- The goal of the Western Environmental Technology Office's Waste Minimization Program is to reduce the quantity of hazardous waste generated without impacting the nature of the testing being conducted.
- The process of cleaning up the facility following the end of the Magnetohydrodynamics program continued in 1995, resulting in the generation of significant quantities of cleanup/stabilization sanitary waste.

Materials Recycled by the Western Environmental Technology Office in 1995

Recycled Material	Western Environmental Technology Office *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	0	1,608
Metals	0	22,075
Paper	0	9,354
Other Materials*	0	50,220
GRAND TOTAL	*0*	*83,257*

* *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.*

- 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 mine water drainage.
- The Western Environmental Technology Office continued to use previously implemented methods of recycling, substitution, and materials control.
- An onsite chemical exchange program was implemented to minimize the quantity of chemicals purchased and in inventory. A regularly updated data base lists all chemicals stored onsite, and is available to all LAN users.

This fact sheet contains information provided by the site. 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
406-494-7441, FAX 406-494-7230

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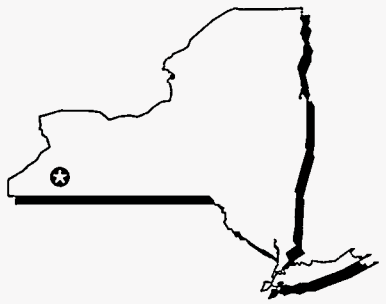
Office of Environmental Management

Waste Generation and Pollution Prevention Progress Fact Sheet

West Valley Demonstration Project



West Valley Demonstration Project – 1995

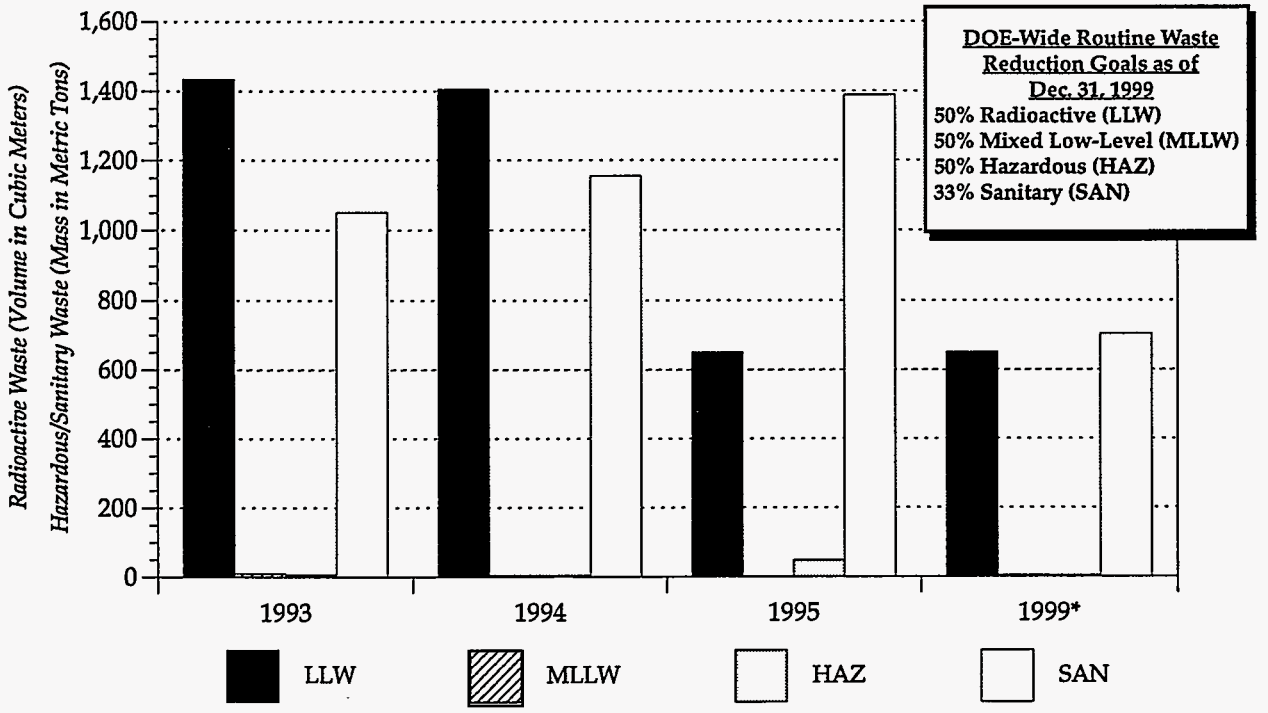
Location:	**West Valley, New York**
Site Size:	**200 Acres**
Operations Office:	**Ohio**
Lead Program Office:	**Environmental Management**
DOE Employees:	**26**
Prime Contractor Employees:	**948**

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)

1995 Pollution Prevention Activities and Accomplishments

- In March 1995, waste loading for decontaminated THOREX wash solution processed through the Cement Solidification System increased from 21.5 weight percent to 27.0 weight percent. This process modification prevented the generation of approximately 78 cubic meters of low-level waste.
- A cooling tower was dismantled, and materials were segregated into three categories. The nonradioactive metal (7.6 cubic meters), nonradioactive wood (168.2 cubic meters), and radioactively contaminated material (4.4 cubic meters) were collected and surveyed. More than 97 percent of the sorted materials (175.8 cubic meters) was free released and disposed as cleanup/stabilization sanitary waste.
- In 1995, 1,575 toner cartridges were sent to a vendor for reuse and credit.
- In 1995, 1,107 usable wooden pallets were sold to a vendor, and 353 pallets were reused onsite.
- In 1995, 625 liters of zinc bromide were shipped to the Idaho National Engineering Laboratory for reuse in shield windows.
- In 1995, 487 corrugated cardboard containers from material receivables were reused as shipping containers.
- After modifications were made to a heating, ventilating, and air conditioning system, 190 liters of previously drained ethylene glycol were reused in the system.

Materials Recycled by the West Valley Demonstration Project in 1995

Recycled Material	West Valley Demonstration Project *(in Metric Tons)*	DOE Complex *(in Metric Tons)*
Automotive	2	1,608
Metals	86	22,075
Paper	242	9,354
Other Materials*	9	50,220
GRAND TOTAL	*339*	*83,257*

* *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.*

- In 1995, 82.4 metric tons of stainless steel, carbon steel, copper, and tungsten were collected and sold to recyclers.
- In 1995, 19 liters of rad-resistant oil were drained from vitrification feed agitator motors and reused in other in-cell equipment, saving approximately $2,508.
- In 1995, 9.8 cubic meters of styrofoam packing were reused onsite for shipping material, and the remainder was shipped to a vendor for recycling.

This fact sheet contains information provided by the site. 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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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		
Argonne National Laboratory–East - Argonne, IL	ER	CH
Argonne National Laboratory–West - Idaho Falls, ID	NE	CH
Battelle Columbus Laboratories - Columbus, OH	EM	OH
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
Naval Petroleum Reserve No. 1 - Tupman, CA	FE	HQ
Nevada Test Site - Mercury, NV	DP	NV
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		
Los Alamos Operations - Los Alamos, NM		
Remote Sensing Laboratory - Nellis Air Force Base, NV		

DOE Sites	Operational Program	Operations Office
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	EM	SR
Stanford Linear Accelerator Center - Stanford, CA	ER	OAK
Waste Isolation Pilot Plant - Carlsbad, NM	EM	AL
Weldon Spring Site Remedial Action Project - St. Charles, MO	EM	OR
Western Area Power Administration - Golden, CO	PM	HQ
Western Environmental Technology Office - Butte, MT	FE	HQ
West Valley Demonstration Project - West Valley, NY	EM	OH

Non-Reporting Sites

Alaska Power Administration - Juneau, AK	PM	HQ
Ames Laboratory - Ames, IA	ER	CH
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
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		
Baker Brothers - Toledo, OH		
Bayo Canyon - Los Alamos, CA		
Chapman Valve - Indian Orchard, MA		

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
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DOE Sites	*Operational Program*	*Operations Office*
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. 3 - Casper, WY	FE	HQ
Naval Petroleum & Oil Shale Reserves - Casper, WY	FE	HQ
Naval Oil Shale Reserve No. 1 - Carbon, CO		
Naval Oil Shale Reserve No. 2 - Uintah, UT		
Naval Petroleum Reserve No. 2 - Buena Vista, CA		

DOE Sites	Operational Program	Operations Office
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
Thomas Jefferson National Accelerator Facility - Newport News, VA	ER	HQ
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		
UMTRA - Green River, UT		
UMTRA - Gunnison, CO		

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DOE Sites	*Operational Program*	*Operations Office*
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		
Yucca Mountain Site Characterization Project - Las Vegas, NV	RW	HQ

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Appendix B

DOE COMPLEX-WIDE DATA

This Appendix presents 1995 waste generation quantities for each reporting site within the DOE complex. Data are 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-27.

Sanitary waste totals for each reporting site are listed on page B-39, and process wastewater totals are listed on page B-40.

Changes to data reported in prior editions of this Report are listed on pages B-41 and B-42. ■

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1995 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	0.00	0.00	2320.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2320.84
	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	2320.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2320.84
2. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	175.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	175.00
	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	175.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	175.00
Totals for waste type	Routine	0.00	0.00	0.00	2495.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2495.84
	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	2495.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2495.84

Data provided by the DOE reporting sites.

1995 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	0.00	0.00	118.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	118.51
	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	118.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	118.51
2. Los Alamos National Laboratory	Routine	0.00	74.07	0.00	1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.53
	Cleanup	0.00	10.65	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	11.07
	Total	0.00	84.62	0.00	1.46	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	86.60
3. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40
	Cleanup	0.00	0.00	0.00	0.00	78.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.60
	Total	0.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.00
4. Hanford Site	Routine	0.00	0.00	0.00	64.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00
	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	64.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00
5. Mound 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	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00
	Total	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00
6. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.30	0.00	0.00	0.00	10.30
	Cleanup	0.00	0.00	0.00	18.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.96
	Total	0.00	0.00	0.00	18.96	0.00	0.00	0.00	0.00	10.30	0.00	0.00	0.00	29.26
7. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	21.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.25
	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	21.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.25
8. Lawrence Livermore National Laboratory	Routine	0.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.40
	Cleanup	0.00	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.50
	Total	0.00	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.90
9. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	3.87	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.95
	Cleanup	0.00	0.00	0.00	0.40	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
	Total	0.00	0.00	0.00	4.27	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.52
10. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	0.01	0.00	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01

Data provided by the DOE reporting sites.

1995 Site Waste Generation
Transuranic Waste (Cubic Meters)

Reporting Site Name		CR	DP	EE	EM	ER	ET	FE	HR	NE	NN	PM	RW	Total Waste
Totals for waste type	Routine	0.00	83.44	0.00	209.10	1.48	0.00	0.00	0.00	10.30	0.00	0.00	0.00	304.32
	Cleanup	0.00	17.20	0.00	49.36	78.77	0.00	0.00	0.00	0.42	0.00	0.00	0.00	145.75
	Total	0.00	100.64	0.00	258.46	80.25	0.00	0.00	0.00	10.72	0.00	0.00	0.00	450.07

Data provided by the DOE reporting sites.

1995 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. Savannah River Site	Routine	0.00	0.00	0.00	21.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.61
	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	21.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.61
2. Los Alamos National Laboratory	Routine	0.00	7.44	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.86
	Cleanup	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
	Total	0.00	8.06	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.48
3. Pacific Northwest 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	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10
	Total	0.00	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10
4. Hanford Site	Routine	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	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	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
5. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	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	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
6. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
	Cleanup	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
	Total	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
7. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.40
	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	0.40	0.00	0.00	0.00	0.40
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	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
	Total	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
9. Lawrence Livermore National Laboratory	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	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
Totals for waste type	Routine	0.00	7.64	0.00	29.64	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	37.68
	Cleanup	0.00	0.62	0.00	0.78	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50
	Total	0.00	8.26	0.00	30.42	5.10	0.00	0.00	0.00	0.40	0.00	0.00	0.00	44.18

Data provided by the DOE reporting sites.

1995 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	669.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	669.00
	Cleanup	0.00	0.00	0.00	71650.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71650.00
	Total	0.00	0.00	0.00	72319.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72319.00
2. Savannah River Site	Routine	0.00	739.19	0.00	7315.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8055.12
	Cleanup	0.00	0.00	0.00	58.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.16
	Total	0.00	739.19	0.00	7374.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8113.28
3. 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	6040.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6040.10
	Total	0.00	0.00	0.00	6040.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6040.10
4. 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	3500.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3500.64
	Total	0.00	0.00	0.00	3500.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3500.64
5. Idaho National Engineering Laboratory	Routine	0.00	288.00	0.00	999.55	0.00	0.00	0.00	0.00	690.64	0.00	0.00	0.00	1978.19
	Cleanup	0.00	0.00	0.00	1103.93	0.00	0.00	0.00	0.00	5.01	0.00	0.00	0.00	1108.94
	Total	0.00	288.00	0.00	2103.48	0.00	0.00	0.00	0.00	695.65	0.00	0.00	0.00	3087.13
6. Los Alamos National Laboratory	Routine	0.00	827.55	0.00	189.14	13.53	0.00	0.00	0.00	15.31	0.00	0.00	14.39	1059.92
	Cleanup	0.00	501.64	0.00	1321.35	23.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1846.26
	Total	0.00	1329.19	0.00	1510.49	36.80	0.00	0.00	0.00	15.31	0.00	0.00	14.39	2906.18
7. Hanford Site	Routine	0.00	0.00	0.00	2234.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2234.00
	Cleanup	0.00	0.00	0.00	625.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	625.00
	Total	0.00	0.00	0.00	2859.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2859.00
8. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	46.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.86
	Cleanup	0.00	0.00	0.00	2675.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2675.94
	Total	0.00	0.00	0.00	2675.94	46.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2722.80
9. Mound Plant	Routine	0.00	0.00	0.00	653.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	653.48
	Cleanup	0.00	0.00	0.00	1925.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1925.76
	Total	0.00	0.00	0.00	2579.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2579.24
10. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	1409.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1409.43
	Cleanup	0.00	0.00	0.00	186.18	0.00	0.00	0.00	0.00	53.89	0.00	0.00	0.00	240.07
	Total	0.00	0.00	0.00	1595.61	0.00	0.00	0.00	0.00	53.89	0.00	0.00	0.00	1649.50

Data provided by the DOE reporting sites.

1995 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
11. Oak Ridge National Laboratory	Routine	0.00	0.00	28.26	757.13	137.15	0.00	0.00	0.00	0.11	0.00	0.00	0.00	922.65
	Cleanup	0.00	0.00	25.15	444.19	65.63	0.00	0.00	0.00	21.22	0.00	0.00	0.00	556.19
	Total	0.00	0.00	53.41	1201.32	202.78	0.00	0.00	0.00	21.33	0.00	0.00	0.00	1478.84
12. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	65.40	119.90	0.00	0.00	0.00	359.70	0.00	0.00	0.00	545.00
	Cleanup	0.00	0.00	0.00	38.50	70.60	0.00	0.00	0.00	212.00	0.00	0.00	0.00	321.10
	Total	0.00	0.00	0.00	103.90	190.50	0.00	0.00	0.00	571.70	0.00	0.00	0.00	866.10
13. 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	827.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	827.27
	Total	0.00	0.00	0.00	827.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	827.27
14. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	794.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	794.16
	Cleanup	0.00	0.00	0.00	9.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.88
	Total	0.00	0.00	0.00	804.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	804.04
15. West Valley Demonstration Project	Routine	0.00	0.00	0.00	651.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	651.00
	Cleanup	0.00	0.00	0.00	44.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.00
	Total	0.00	0.00	0.00	695.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	695.00
16. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	661.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	661.00
	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	661.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	661.00
17. Oak Ridge Y-12 Plant	Routine	0.00	609.37	0.00	25.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	634.55
	Cleanup	0.00	0.00	0.00	11.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.61
	Total	0.00	609.37	0.00	36.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	646.16
18. 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	511.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	511.13
	Total	0.00	0.00	0.00	511.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	511.13
19. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	186.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	186.00
	Cleanup	0.00	0.00	0.00	0.00	205.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	205.00
	Total	0.00	0.00	0.00	0.00	391.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	391.00
20. 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	362.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	362.00
	Total	0.00	0.00	0.00	362.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	362.00

Data provided by the DOE reporting sites.

1995 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
21. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	290.53	0.00	0.00	0.00	290.53
	Cleanup	0.00	0.00	0.00	7.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.25
	Total	0.00	0.00	0.00	7.25	0.00	0.00	0.00	0.00	290.53	0.00	0.00	0.00	297.78
22. Sandia National Laboratories/California	Routine	0.00	12.18	0.00	0.85	3.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.91
	Cleanup	0.00	164.96	0.00	11.46	52.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	229.12
	Total	0.00	177.14	0.00	12.31	56.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	246.03
23. Pantex Plant	Routine	0.00	170.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.51
	Cleanup	0.00	0.00	0.00	14.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.41
	Total	0.00	170.51	0.00	14.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	184.92
24. Pinellas Plant	Routine	0.00	0.00	0.00	68.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00
	Cleanup	0.00	0.00	0.00	68.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00
	Total	0.00	0.00	0.00	136.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	136.00
25. Lawrence Livermore National Laboratory	Routine	0.00	91.60	0.00	10.40	6.60	0.00	0.00	0.00	7.60	0.00	0.00	0.00	116.20
	Cleanup	0.00	15.30	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.70
	Total	0.00	106.90	0.00	13.80	6.60	0.00	0.00	0.00	7.60	0.00	0.00	0.00	134.90
26. Sandia National Laboratories/New Mexico	Routine	2.18	11.81	0.00	3.26	0.19	0.00	0.00	0.00	2.07	5.24	0.00	0.00	24.75
	Cleanup	1.90	29.99	0.00	17.50	0.00	0.00	0.00	0.00	8.27	0.19	0.00	0.00	57.85
	Total	4.08	41.80	0.00	20.76	0.19	0.00	0.00	0.00	10.34	5.43	0.00	0.00	82.61
27. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	0.00	29.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.84
	Cleanup	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50
	Total	0.00	0.00	0.00	0.00	36.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.34
28. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	34.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.11
	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	34.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.11
29. 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	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00
	Total	0.00	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00
30. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	23.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.44
	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	23.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.44

Data provided by the DOE reporting sites.

1995 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
31. Stanford Linear Accelerator 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	10.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.11
	Total	0.00	0.00	0.00	0.00	10.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.11
32. Kansas City Plant	Routine	0.00	6.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
	Cleanup	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.07
	Total	0.00	8.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.93
Totals for waste type	Routine	2.18	2757.07	28.26	15845.91	1262.50	0.00	0.00	0.00	1365.96	5.24	0.00	14.39	21281.51
	Cleanup	1.90	747.97	25.15	91457.66	433.81	0.00	0.00	0.00	300.39	0.19	0.00	0.00	92967.07
	Total	4.08	3505.04	53.41	107303.57	1696.31	0.00	0.00	0.00	1666.35	5.43	0.00	14.39	114248.58

Data provided by the DOE reporting sites.

1995 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. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	96.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.55
	Cleanup	0.00	0.00	0.00	2486.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2486.71
	Total	0.00	0.00	0.00	2583.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2583.26
2. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	741.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	741.92
	Cleanup	0.00	0.00	0.00	414.32	0.00	0.00	0.00	0.00	4.71	0.00	0.00	0.00	419.03
	Total	0.00	0.00	0.00	1156.24	0.00	0.00	0.00	0.00	4.71	0.00	0.00	0.00	1160.95
3. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	Cleanup	0.00	0.00	0.00	792.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00
	Total	0.00	0.00	0.00	796.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	796.00
4. Savannah River Site	Routine	0.00	4.93	0.00	316.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	321.22
	Cleanup	0.00	0.00	0.00	364.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	364.89
	Total	0.00	4.93	0.00	681.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	686.11
5. Hanford Site	Routine	0.00	0.00	0.00	471.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	471.00
	Cleanup	0.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00
	Total	0.00	0.00	0.00	487.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	487.00
6. 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	327.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	327.70
	Total	0.00	0.00	0.00	327.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	327.70
7. 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	289.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	289.12
	Total	0.00	0.00	0.00	289.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	289.12
8. Oak Ridge Y-12 Plant	Routine	0.00	37.07	0.00	38.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.83
	Cleanup	0.00	2.95	0.00	17.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.16
	Total	0.00	40.02	0.00	55.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.99
9. Los Alamos National Laboratory	Routine	0.00	5.56	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.26
	Cleanup	0.00	20.97	0.00	58.76	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	80.56
	Total	0.00	26.53	0.00	58.34	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	87.40
10. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.02
	Cleanup	0.00	0.00	0.00	65.67	0.00	0.00	0.00	0.00	1.36	0.00	0.00	0.00	67.03
	Total	0.00	0.00	0.00	71.69	0.00	0.00	0.00	0.00	1.36	0.00	0.00	0.00	73.05

Data provided by the DOE reporting sites.

1995 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
11. 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	49.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.55
	Total	0.00	0.00	0.00	49.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.55
12. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	6.42	4.95	0.00	0.00	0.00	12.24	0.00	0.00	0.00	23.61
	Cleanup	0.00	0.00	0.00	1.88	2.43	0.00	0.00	0.00	14.76	0.00	0.00	0.00	19.07
	Total	0.00	0.00	0.00	8.30	7.38	0.00	0.00	0.00	27.00	0.00	0.00	0.00	42.68
13. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	0.00	17.69	0.00	0.00	0.00	1.97	0.00	0.00	0.00	19.66
	Cleanup	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	19.35	0.00	0.00	0.00	21.35
	Total	0.00	0.00	0.00	1.00	18.69	0.00	0.00	0.00	21.32	0.00	0.00	0.00	41.01
14. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.50
	Cleanup	0.00	0.00	0.00	0.00	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.50
	Total	0.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.00
15. Lawrence Livermore National Laboratory	Routine	0.00	7.40	0.00	14.70	0.50	0.00	0.00	0.00	0.70	0.00	0.00	0.00	23.30
	Cleanup	0.00	5.60	0.00	5.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.70
	Total	0.00	13.00	0.00	19.70	0.60	0.00	0.00	0.00	0.70	0.00	0.00	0.00	34.00
16. Pantex Plant	Routine	0.00	28.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.15
	Cleanup	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
	Total	0.00	28.15	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.42
17. Sandia National Laboratories/New Mexico	Routine	0.23	2.24	0.00	14.89	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	17.38
	Cleanup	0.00	0.82	0.00	2.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03
	Total	0.23	3.06	0.00	17.10	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	20.41
18. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03
	Cleanup	0.00	0.00	0.00	0.00	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.20
	Total	0.00	0.00	0.00	0.00	15.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.23
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	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.50
	Total	0.00	0.00	0.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.50
20. 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	6.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.49
	Total	0.00	0.00	0.00	6.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.49

Data provided by the DOE reporting sites.

1995 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
21. West Valley Demonstration Project	Routine	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
	Cleanup	0.00	0.00	0.00	4.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06
	Total	0.00	0.00	0.00	5.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.25
22. 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	3.60	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	Total	0.00	3.60	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
23. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40
	Cleanup	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
	Total	0.00	0.00	0.00	0.00	3.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.92
24. Sandia National Laboratories/California	Routine	0.00	1.51	0.00	0.11	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10
	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	1.51	0.00	0.11	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10
25. Mound 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	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	Total	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
26. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
	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	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
27. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
	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	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
28. 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	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
	Total	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
29. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.40
	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	0.40	0.00	0.00	0.00	0.40
30. 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	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

Data provided by the DOE reporting sites.

1995 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
Totals for waste type	Routine	0.23	87.06	0.00	1713.55	50.95	0.00	0.00	0.00	15.33	0.00	0.00	0.00	1867.13
	Cleanup	0.00	33.94	0.00	4915.72	33.75	0.00	0.00	0.00	41.01	0.00	0.00	0.00	5024.42
	Total	0.23	121.00	0.00	6629.29	84.70	0.00	0.00	0.00	56.34	0.00	0.00	0.00	6891.55

Data provided by the DOE reporting sites.

1995 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. Kansas City Plant	Routine	0.00	106.31	0.00	81.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	187.75
	Cleanup	0.00	12.94	0.00	997.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1010.41
	Total	0.00	119.25	0.00	1078.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1198.16
2. Los Alamos National Laboratory	Routine	0.00	24.43	0.22	0.27	0.47	0.00	0.00	0.00	0.09	0.12	0.00	0.08	25.68
	Cleanup	0.00	27.44	0.07	1105.90	0.09	0.00	0.00	0.00	0.07	0.17	0.00	0.00	1133.74
	Total	0.00	51.87	0.29	1106.17	0.56	0.00	0.00	0.00	0.16	0.29	0.00	0.08	1159.42
3. Lawrence Livermore National Laboratory	Routine	0.00	111.70	0.00	5.00	2.60	0.00	0.00	0.00	5.10	0.90	0.00	0.00	125.30
	Cleanup	0.00	250.50	0.00	107.10	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	359.50
	Total	0.00	362.20	0.00	112.10	4.50	0.00	0.00	0.00	5.10	0.90	0.00	0.00	484.80
4. Nevada Test Site	Routine	0.00	55.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.50
	Cleanup	0.00	0.00	0.00	330.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	330.40
	Total	0.00	55.50	0.00	330.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	385.90
5. Pantex Plant	Routine	0.00	60.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.17
	Cleanup	0.00	0.00	0.00	205.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	205.22
	Total	0.00	60.17	0.00	205.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	265.39
6. Hanford Site	Routine	0.00	0.00	0.00	172.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	172.00
	Cleanup	0.00	0.00	0.00	62.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.00
	Total	0.00	0.00	0.00	234.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	234.00
7. Sandia National Laboratories/New Mexico	Routine	0.62	31.27	2.33	1.60	0.24	0.00	0.25	0.00	0.00	0.40	0.00	0.02	36.73
	Cleanup	0.54	0.16	0.00	166.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	167.12
	Total	1.16	31.43	2.33	168.02	0.24	0.00	0.25	0.00	0.00	0.40	0.00	0.02	203.87
8. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	153.52	0.00	153.52
	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	153.52	0.00	153.52
9. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	18.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.46
	Cleanup	0.00	0.00	0.00	93.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.14
	Total	0.00	0.00	0.00	111.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.60
10. Mound Plant	Routine	0.00	0.00	0.00	94.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.16
	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	94.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.16

Data provided by the DOE reporting sites.

1995 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
11. 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	86.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.00
	Total	0.00	0.00	0.00	86.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.00
12. Waste Isolation Pilot Plant	Routine	0.00	0.00	0.00	1.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.79
	Cleanup	0.00	0.00	0.00	58.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.63
	Total	0.00	0.00	0.00	60.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.42
13. Savannah River Site	Routine	0.00	0.32	0.00	56.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.24
	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	0.32	0.00	56.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.24
14. Oak Ridge National Laboratory	Routine	0.00	0.00	2.13	4.29	38.18	0.00	0.00	0.00	0.09	0.00	0.00	0.00	44.69
	Cleanup	0.00	0.00	0.00	0.36	4.75	0.00	0.00	0.00	0.94	0.00	0.00	0.00	6.05
	Total	0.00	0.00	2.13	4.65	42.93	0.00	0.00	0.00	1.03	0.00	0.00	0.00	50.74
15. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	48.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.19
	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	0.00	0.00	0.00	48.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.19
16. West Valley Demonstration Project	Routine	0.00	0.00	0.00	47.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.71
	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	47.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.71
17. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	1.25	17.90	0.00	0.00	0.00	5.74	0.00	0.00	0.00	24.89
	Cleanup	0.00	0.00	0.00	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.20
	Total	0.00	0.00	0.00	22.45	17.90	0.00	0.00	0.00	5.74	0.00	0.00	0.00	46.09
18. Lawrence Berkeley National Laboratory	Routine	0.00	0.01	3.15	2.04	28.42	0.00	0.36	0.00	0.00	0.00	0.00	0.61	34.59
	Cleanup	0.00	0.00	0.00	14.33	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.93
	Total	0.00	0.01	3.15	16.37	30.02	0.00	0.36	0.00	0.00	0.00	0.00	0.61	50.52
19. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	31.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.90
	Cleanup	0.00	0.00	0.00	0.00	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.70
	Total	0.00	0.00	0.00	0.00	40.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.60
20. Sandia National Laboratories/California	Routine	0.00	16.42	0.00	1.14	5.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.81
	Cleanup	0.00	11.08	0.00	0.77	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.39
	Total	0.00	27.50	0.00	1.91	8.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.20

Data provided by the DOE reporting sites.

1995 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
21. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	36.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.50
	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	36.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.50
22. 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	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00
	Total	0.00	0.00	0.00	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00
23. Idaho National Engineering Laboratory	Routine	0.00	0.51	0.00	23.59	0.00	0.00	0.00	0.00	3.31	0.00	0.00	0.00	27.41
	Cleanup	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64
	Total	0.00	0.51	0.00	25.23	0.00	0.00	0.00	0.00	3.31	0.00	0.00	0.00	29.05
24. Western Environmental Technology Office	Routine	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	15.00
	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	15.00	0.00	0.00	0.00	0.00	0.00	15.00
25. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.50
	Cleanup	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20
	Total	0.00	0.00	0.00	0.00	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.70
26. Pittsburgh Energy Technology Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	9.44	0.00	0.00	0.00	0.00	0.00	9.44
	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	0.00	0.00	9.44	0.00	0.00	0.00	0.00	0.00	9.44
27. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.42	0.00	0.00	0.00	9.42
	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	9.42	0.00	0.00	0.00	9.42
28. 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	4.63	0.00	4.63
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51	0.00	3.51
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.14	0.00	8.14
29. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00	3.10	0.00	0.00	0.00	4.00
	Cleanup	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	3.40
	Total	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	6.30	0.00	0.00	0.00	7.40
30. Naval Petroleum Reserve No. 1	Routine	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	0.00	0.00	0.00	0.00	1.92
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	2.47	0.00	0.00	0.00	0.00	0.00	2.47
	Total	0.00	0.00	0.00	0.00	0.00	0.00	4.39	0.00	0.00	0.00	0.00	0.00	4.39

Data provided by the DOE reporting sites.

1995 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
31. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	3.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.71
	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	3.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.71
32. North Las Vegas Facility	Routine	0.00	0.00	0.00	3.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.39
	Cleanup	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
	Total	0.00	0.00	0.00	3.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.86
33. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06
	Cleanup	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	Total	0.00	0.00	0.00	0.00	3.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.09
Totals for waste type	Routine	0.62	410.07	7.83	512.57	224.93	0.00	26.97	0.00	26.85	1.42	158.15	0.69	1370.11
	Cleanup	0.54	302.59	0.07	3285.78	23.81	0.00	2.47	0.00	4.21	0.17	3.51	0.00	3623.16
	Total	1.16	712.66	7.90	3798.35	248.74	0.00	29.44	0.00	31.06	1.59	161.66	0.69	4993.26

Data provided by the DOE reporting sites.

1995 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. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	0.00	1243.56	0.00	0.00	0.00	0.42	0.00	0.00	0.00	1243.98
	Cleanup	0.00	0.00	0.00	4657.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4657.00
	Total	0.00	0.00	0.00	4657.00	1243.56	0.00	0.00	0.00	0.42	0.00	0.00	0.00	5900.98
2. Pantex Plant	Routine	0.00	323.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	323.67
	Cleanup	0.00	0.00	0.00	2339.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2339.82
	Total	0.00	323.67	0.00	2339.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2663.49
3. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	38.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.10
	Cleanup	0.00	0.00	0.00	0.00	1792.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1792.80
	Total	0.00	0.00	0.00	0.00	1830.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1830.90
4. 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	753.00	0.00	435.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1188.00
	Total	0.00	753.00	0.00	435.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1188.00
5. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	798.45	0.00	798.45
	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	798.45	0.00	798.45
6. Los Alamos National Laboratory	Routine	2.27	91.78	0.08	13.67	3.10	0.00	0.00	0.00	0.00	0.01	0.00	0.10	111.01
	Cleanup	0.00	19.67	0.01	367.72	0.06	0.00	0.00	0.00	0.09	0.00	0.00	0.00	387.55
	Total	2.27	111.45	0.09	381.39	3.16	0.00	0.00	0.00	0.09	0.01	0.00	0.10	498.56
7. Lawrence Livermore National Laboratory	Routine	0.00	142.40	0.00	9.30	4.80	0.00	0.00	0.00	13.90	0.30	0.00	0.00	170.70
	Cleanup	0.00	49.50	0.00	6.50	37.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.60
	Total	0.00	191.90	0.00	15.80	42.40	0.00	0.00	0.00	13.90	0.30	0.00	0.00	264.30
8. Sandia National Laboratories/New Mexico	Routine	11.33	120.33	1.47	74.68	2.39	0.00	1.42	0.00	0.06	0.17	0.00	0.12	211.97
	Cleanup	0.00	7.09	0.00	36.72	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	44.13
	Total	11.33	127.42	1.47	111.40	2.39	0.00	1.42	0.00	0.06	0.49	0.00	0.12	256.10
9. Hanford Site	Routine	0.00	0.00	0.00	113.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	113.00
	Cleanup	0.00	0.00	0.00	27.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.00
	Total	0.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	140.00
10. Naval Petroleum Reserve No. 1	Routine	0.00	0.00	0.00	0.00	0.00	0.00	4.90	0.00	0.00	0.00	0.00	0.00	4.90
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	129.39	0.00	0.00	0.00	0.00	0.00	129.39
	Total	0.00	0.00	0.00	0.00	0.00	0.00	134.29	0.00	0.00	0.00	0.00	0.00	134.29

Data provided by the DOE reporting sites.

1995 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
11. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	1.53	1.69	23.17	0.00	0.29	0.00	0.00	0.00	0.00	0.52	27.20
	Cleanup	0.00	0.00	0.00	74.90	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	91.90
	Total	0.00	0.00	1.53	76.59	40.17	0.00	0.29	0.00	0.00	0.00	0.00	0.52	119.10
12. 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	82.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.00
	Total	0.00	0.00	0.00	82.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.00
13. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	70.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.40
	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	70.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.40
14. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	59.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.24
	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	59.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.24
15. 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	42.00	0.00	42.00
	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	0.00	0.00	42.00	0.00	42.00
16. Sandia National Laboratories/California	Routine	0.00	13.13	0.00	0.91	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.24
	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	13.13	0.00	0.91	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.24
17. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	1.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81
	Cleanup	0.00	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10
	Total	0.00	0.00	0.00	0.00	6.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.91
18. Pacific Northwest National 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
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	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25
	Total	0.00	0.00	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25
20. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.95
	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	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.95

Data provided by the DOE reporting sites.

1995 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
21. Kansas City Plant	Routine	0.00	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75
	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	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75
22. North Las Vegas Facility	Routine	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
	Cleanup	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	Total	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
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	0.20	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.30
	Total	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.30
24. Waste Isolation Pilot Plant	Routine	0.00	0.00	0.00	0.02	0.00	0.00	0.00	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	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Totals for waste type	Routine	13.60	693.72	3.08	213.27	1463.16	0.00	6.61	0.00	14.38	0.48	840.45	0.62	3249.38
	Cleanup	0.00	829.44	0.01	8033.11	1852.56	0.00	129.39	0.00	0.19	0.32	0.00	0.00	10845.03
	Total	13.60	1523.18	3.09	8246.38	3315.72	0.00	136.00	0.00	14.57	0.80	840.45	0.62	14094.43

Data provided by the DOE reporting sites.

1995 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. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	0.00	183.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.00
	Cleanup	0.00	0.00	0.00	0.00	6036.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6036.00
	Total	0.00	0.00	0.00	0.00	6219.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6219.00
2. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	388.09	0.00	388.09
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2836.20	0.00	2836.20
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3224.29	0.00	3224.29
3. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	63.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.48
	Cleanup	0.00	0.00	0.00	911.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	911.00
	Total	0.00	0.00	0.00	911.00	63.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	974.48
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	181.00	0.00	555.49	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	737.37
	Total	0.00	181.00	0.00	555.49	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	737.37
5. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50
	Cleanup	0.00	0.00	0.00	0.00	262.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	262.00
	Total	0.00	0.00	0.00	0.00	263.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	263.50
6. Kansas City Plant	Routine	0.00	72.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.17
	Cleanup	0.00	130.43	0.00	5.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	135.92
	Total	0.00	202.60	0.00	5.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	208.09
7. Pantex 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	152.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	152.68
	Total	0.00	0.00	0.00	152.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	152.68
8. Hanford Site	Routine	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
	Cleanup	0.00	0.00	0.00	79.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.00
	Total	0.00	0.00	0.00	79.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.70
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	25.20	0.00	45.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.10
	Total	0.00	25.20	0.00	45.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.10
10. 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	60.98	0.00	60.98
	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	60.98	0.00	60.98

Data provided by the DOE reporting sites.

1995 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
11. 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	0.00	0.00	41.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.63
	Total	0.00	0.00	0.00	0.00	41.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.63
12. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	30.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.43
	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	30.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.43
13. Sandia National Laboratories/California	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	19.22	0.00	1.34	6.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.70
	Total	0.00	19.22	0.00	1.34	6.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.70
14. Mound Plant	Routine	0.00	0.00	0.00	19.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.03
	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	19.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.03
15. 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	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00
	Total	0.00	0.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00
16. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50
	Cleanup	0.00	0.00	0.00	0.00	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.60
	Total	0.00	0.00	0.00	0.00	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.10
17. 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	1.29	0.82	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.61
	Total	0.00	0.00	1.29	0.82	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.61
18. Sandia National Laboratories/New Mexico	Routine	0.00	0.03	0.00	1.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.82
	Cleanup	0.00	0.00	0.00	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.70
	Total	0.00	0.03	0.00	14.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.52
19. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.41	0.00	0.00	0.00	13.41
	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	13.41	0.00	0.00	0.00	13.41
20. 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	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.80
	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.

1995 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
21. 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	0.00	0.00	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.30
	Total	0.00	0.00	0.00	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.30
22. Nevada Test Site	Routine	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80
	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	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80
23. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.85
	Cleanup	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
	Total	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.92
24. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
	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	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
25. Pittsburgh Energy Technology Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.07
	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	0.07	0.00	0.00	0.00	0.00	0.00	0.07
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
27. 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	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	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	74.00	0.00	52.58	249.71	0.00	0.07	0.00	13.63	0.00	449.07	0.00	839.06
	Cleanup	0.00	355.85	1.29	1794.59	6375.88	0.00	0.88	0.00	0.00	0.00	2836.20	0.00	11364.69
	Total	0.00	429.85	1.29	1847.17	6625.59	0.00	0.95	0.00	13.63	0.00	3285.27	0.00	12203.75

Data provided by the DOE reporting sites.

1995 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. 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	40.19	0.00	176.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	216.87
	Total	0.00	40.19	0.00	176.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	216.87
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	100.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.81
	Total	0.00	0.00	0.00	100.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.81
3. 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	96.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.10
	Total	0.00	0.00	0.00	96.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.10
4. 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	83.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.27
	Total	0.00	0.00	0.00	83.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.27
5. Hanford Site	Routine	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	Cleanup	0.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00
	Total	0.00	0.00	0.00	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.00
6. 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	9.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.61
	Total	0.00	0.00	0.00	9.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.61
7. 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	7.34	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.93
	Total	0.00	7.34	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.93
8. 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	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00
	Total	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00
9. 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	2.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.98
	Total	0.00	0.00	0.00	2.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.98
10. 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	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48
	Total	0.00	0.00	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48

Data provided by the DOE reporting sites.

1995 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
11. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
	Cleanup	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80
	Total	0.00	0.00	0.00	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10
12. 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	0.30	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
	Total	0.00	0.30	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
13. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
	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	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
14. 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	0.13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
	Total	0.00	0.00	0.00	0.13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
15. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.08
	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	0.08	0.00	0.00	0.00	0.08
Totals for waste type	Routine	0.00	0.00	0.00	4.30	0.23	0.00	0.00	0.00	0.08	0.00	0.00	0.00	4.61
	Cleanup	0.00	47.83	0.00	492.55	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	540.39
	Total	0.00	47.83	0.00	496.85	0.24	0.00	0.00	0.00	0.08	0.00	0.00	0.00	545.00

Data provided by the DOE reporting sites.

1995 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	669.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	669.00
	Cleanup	0.00	0.00	0.00	71650.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71650.00
	Total	0.00	0.00	0.00	72319.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72319.00
2. Savannah River Site	Routine	0.00	739.19	0.00	9755.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10494.47
	Cleanup	0.00	0.00	0.00	58.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.16
	Total	0.00	739.19	0.00	9813.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10552.63
3. 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	6040.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6040.10
	Total	0.00	0.00	0.00	6040.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6040.10
4. 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	3500.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3500.64
	Total	0.00	0.00	0.00	3500.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3500.64
5. Idaho National Engineering Laboratory	Routine	0.00	288.00	0.00	1174.56	0.00	0.00	0.00	0.00	690.64	0.00	0.00	0.00	2153.20
	Cleanup	0.00	0.00	0.00	1103.93	0.00	0.00	0.00	0.00	5.01	0.00	0.00	0.00	1108.94
	Total	0.00	288.00	0.00	2278.49	0.00	0.00	0.00	0.00	695.65	0.00	0.00	0.00	3262.14
6. Los Alamos National Laboratory	Routine	0.00	901.62	0.00	190.60	13.53	0.00	0.00	0.00	15.31	0.00	0.00	14.39	1135.45
	Cleanup	0.00	512.29	0.00	1321.35	23.27	0.00	0.00	0.00	0.42	0.00	0.00	0.00	1857.33
	Total	0.00	1413.91	0.00	1511.95	36.80	0.00	0.00	0.00	15.73	0.00	0.00	14.39	2992.78
7. Hanford Site	Routine	0.00	0.00	0.00	2298.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2298.00
	Cleanup	0.00	0.00	0.00	625.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	625.00
	Total	0.00	0.00	0.00	2923.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2923.00
8. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	46.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.86
	Cleanup	0.00	0.00	0.00	2675.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2675.94
	Total	0.00	0.00	0.00	2675.94	46.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2722.80
9. Mound Plant	Routine	0.00	0.00	0.00	653.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	653.48
	Cleanup	0.00	0.00	0.00	1955.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1955.76
	Total	0.00	0.00	0.00	2609.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2609.24
10. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	1409.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1409.43
	Cleanup	0.00	0.00	0.00	186.18	0.00	0.00	0.00	0.00	53.89	0.00	0.00	0.00	240.07
	Total	0.00	0.00	0.00	1595.61	0.00	0.00	0.00	0.00	53.89	0.00	0.00	0.00	1649.50

Data provided by the DOE reporting sites.

1995 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
11. Oak Ridge National Laboratory	Routine	0.00	0.00	28.26	761.00	137.23	0.00	0.00	0.00	0.11	0.00	0.00	0.00	926.60
	Cleanup	0.00	0.00	25.15	444.59	65.80	0.00	0.00	0.00	21.22	0.00	0.00	0.00	556.76
	Total	0.00	0.00	53.41	1205.59	203.03	0.00	0.00	0.00	21.33	0.00	0.00	0.00	1483.36
12. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	65.40	119.90	0.00	0.00	0.00	370.00	0.00	0.00	0.00	555.30
	Cleanup	0.00	0.00	0.00	57.46	70.60	0.00	0.00	0.00	212.00	0.00	0.00	0.00	340.06
	Total	0.00	0.00	0.00	122.86	190.50	0.00	0.00	0.00	582.00	0.00	0.00	0.00	895.36
13. 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	827.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	827.27
	Total	0.00	0.00	0.00	827.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	827.27
14. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	815.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	815.41
	Cleanup	0.00	0.00	0.00	9.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.88
	Total	0.00	0.00	0.00	825.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	825.29
15. West Valley Demonstration Project	Routine	0.00	0.00	0.00	651.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	651.00
	Cleanup	0.00	0.00	0.00	44.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.00
	Total	0.00	0.00	0.00	695.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	695.00
16. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	661.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	661.00
	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	661.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	661.00
17. Oak Ridge Y-12 Plant	Routine	0.00	609.37	0.00	25.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	634.55
	Cleanup	0.00	0.00	0.00	11.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.61
	Total	0.00	609.37	0.00	36.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	646.16
18. 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	511.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	511.13
	Total	0.00	0.00	0.00	511.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	511.13
19. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	187.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	187.40
	Cleanup	0.00	0.00	0.00	0.00	283.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	283.60
	Total	0.00	0.00	0.00	0.00	471.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	471.00
20. 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	362.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	362.00
	Total	0.00	0.00	0.00	362.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	362.00

Data provided by the DOE reporting sites.

1995 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
21. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	290.53	0.00	0.00	0.00	290.53
	Cleanup	0.00	0.00	0.00	7.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.25
	Total	0.00	0.00	0.00	7.25	0.00	0.00	0.00	0.00	290.53	0.00	0.00	0.00	297.78
22. Sandia National Laboratories/California	Routine	0.00	12.18	0.00	0.85	3.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.91
	Cleanup	0.00	164.96	0.00	11.46	52.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	229.12
	Total	0.00	177.14	0.00	12.31	56.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	246.03
23. Pantex Plant	Routine	0.00	170.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.51
	Cleanup	0.00	0.00	0.00	14.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.41
	Total	0.00	170.51	0.00	14.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	184.92
24. Lawrence Livermore National Laboratory	Routine	0.00	98.00	0.00	10.40	6.60	0.00	0.00	0.00	7.60	0.00	0.00	0.00	122.60
	Cleanup	0.00	24.80	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.20
	Total	0.00	122.80	0.00	13.80	6.60	0.00	0.00	0.00	7.60	0.00	0.00	0.00	150.80
25. Pinellas Plant	Routine	0.00	0.00	0.00	68.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00
	Cleanup	0.00	0.00	0.00	68.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00
	Total	0.00	0.00	0.00	136.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	136.00
26. Sandia National Laboratories/New Mexico	Routine	2.18	11.81	0.00	3.26	0.19	0.00	0.00	0.00	2.07	5.24	0.00	0.00	24.75
	Cleanup	1.90	29.99	0.00	17.50	0.00	0.00	0.00	0.00	8.27	0.19	0.00	0.00	57.85
	Total	4.08	41.80	0.00	20.76	0.19	0.00	0.00	0.00	10.34	5.43	0.00	0.00	82.61
27. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	0.00	29.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.84
	Cleanup	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50
	Total	0.00	0.00	0.00	0.00	36.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.34
28. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	34.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.11
	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	34.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.11
29. 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	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00
	Total	0.00	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00
30. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	23.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.44
	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	23.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.44

Data provided by the DOE reporting sites.

1995 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
31. Stanford Linear Accelerator 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	10.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.11
	Total	0.00	0.00	0.00	0.00	10.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.11
32. Kansas City Plant	Routine	0.00	6.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
	Cleanup	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.07
	Total	0.00	8.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.93
Totals for waste type	Routine	2.18	2837.54	28.26	18550.85	1263.98	0.00	0.00	0.00	1376.26	5.24	0.00	14.39	24078.70
	Cleanup	1.90	768.12	25.15	91507.02	512.58	0.00	0.00	0.00	300.81	0.19	0.00	0.00	93115.77
	Total	4.08	3605.66	53.41	110057.87	1776.56	0.00	0.00	0.00	1677.07	5.43	0.00	14.39	117194.47

Data provided by the DOE reporting sites.

1995 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. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	99.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.89
	Cleanup	0.00	0.00	0.00	2486.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2486.71
	Total	0.00	0.00	0.00	2586.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2586.60
2. Oak Ridge K-25 Site	Routine	0.00	0.00	0.00	741.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	741.92
	Cleanup	0.00	0.00	0.00	510.42	0.00	0.00	0.00	0.00	4.71	0.00	0.00	0.00	515.13
	Total	0.00	0.00	0.00	1252.34	0.00	0.00	0.00	0.00	4.71	0.00	0.00	0.00	1257.05
3. Fernald Environmental Management Project	Routine	0.00	0.00	0.00	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.30
	Cleanup	0.00	0.00	0.00	793.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	793.80
	Total	0.00	0.00	0.00	798.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	798.10
4. Savannah River Site	Routine	0.00	4.93	0.00	337.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	342.83
	Cleanup	0.00	0.00	0.00	364.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	364.89
	Total	0.00	4.93	0.00	702.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	707.72
5. Hanford Site	Routine	0.00	0.00	0.00	479.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	479.00
	Cleanup	0.00	0.00	0.00	31.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.00
	Total	0.00	0.00	0.00	510.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	510.00
6. 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	428.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	428.51
	Total	0.00	0.00	0.00	428.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	428.51
7. 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	372.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	372.39
	Total	0.00	0.00	0.00	372.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	372.39
8. Los Alamos National Laboratory	Routine	0.00	13.00	0.00	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.12
	Cleanup	0.00	61.79	0.00	235.44	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	298.06
	Total	0.00	74.79	0.00	237.56	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	313.18
9. Oak Ridge Y-12 Plant	Routine	0.00	37.07	0.00	38.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.83
	Cleanup	0.00	10.29	0.00	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.09
	Total	0.00	47.36	0.00	56.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	103.92
10. Idaho National Engineering Laboratory	Routine	0.00	0.00	0.00	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.02
	Cleanup	0.00	0.00	0.00	65.67	0.00	0.00	0.00	0.00	1.36	0.00	0.00	0.00	67.03
	Total	0.00	0.00	0.00	71.69	0.00	0.00	0.00	0.00	1.36	0.00	0.00	0.00	73.05

Data provided by the DOE reporting sites.

1995 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
11. 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	59.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.37
	Total	0.00	0.00	0.00	59.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.37
12. Oak Ridge National Laboratory	Routine	0.00	0.00	0.00	6.69	4.95	0.00	0.00	0.00	12.24	0.00	0.00	0.00	23.88
	Cleanup	0.00	0.00	0.00	2.58	2.44	0.00	0.00	0.00	14.76	0.00	0.00	0.00	19.78
	Total	0.00	0.00	0.00	9.27	7.39	0.00	0.00	0.00	27.00	0.00	0.00	0.00	43.66
13. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.50
	Cleanup	0.00	0.00	0.00	0.00	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.60
	Total	0.00	0.00	0.00	0.00	42.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.10
14. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	0.00	17.69	0.00	0.00	0.00	2.37	0.00	0.00	0.00	20.06
	Cleanup	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	19.35	0.00	0.00	0.00	21.35
	Total	0.00	0.00	0.00	1.00	18.69	0.00	0.00	0.00	21.72	0.00	0.00	0.00	41.41
15. Lawrence Livermore National Laboratory	Routine	0.00	7.60	0.00	14.70	0.50	0.00	0.00	0.00	0.70	0.00	0.00	0.00	23.50
	Cleanup	0.00	5.90	0.00	5.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.10
	Total	0.00	13.50	0.00	19.80	0.60	0.00	0.00	0.00	0.70	0.00	0.00	0.00	34.60
16. Pantex Plant	Routine	0.00	28.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.15
	Cleanup	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
	Total	0.00	28.15	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.42
17. Sandia National Laboratories/New Mexico	Routine	0.23	2.24	0.00	14.89	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	17.38
	Cleanup	0.00	0.82	0.00	2.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03
	Total	0.23	3.06	0.00	17.10	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	20.41
18. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26
	Cleanup	0.00	0.00	0.00	0.00	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.20
	Total	0.00	0.00	0.00	0.00	15.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.46
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	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.50
	Total	0.00	0.00	0.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.50
20. 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	9.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.49
	Total	0.00	0.00	0.00	9.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.49

Data provided by the DOE reporting sites.

1995 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
21. West Valley Demonstration Project	Routine	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
	Cleanup	0.00	0.00	0.00	6.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.54
	Total	0.00	0.00	0.00	7.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.73
22. 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	3.60	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	Total	0.00	3.60	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
23. Lawrence Berkeley National Laboratory	Routine	0.00	0.00	0.00	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40
	Cleanup	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
	Total	0.00	0.00	0.00	0.00	3.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.92
24. 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	2.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.98
	Total	0.00	0.00	0.00	2.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.98
25. Sandia National Laboratories/California	Routine	0.00	1.51	0.00	0.11	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10
	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	1.51	0.00	0.11	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10
26. Mound 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	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	Total	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
27. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
	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	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
28. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	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	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.48
29. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
	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	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
30. 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	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
	Total	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40

Data provided by the DOE reporting sites.

1995 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
31. 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	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
Totals for waste type	Routine	0.23	94.70	0.00	1747.49	51.18	0.00	0.00	0.00	15.81	0.00	0.00	0.00	1909.41
	Cleanup	0.00	82.40	0.00	5409.05	38.86	0.00	0.00	0.00	41.01	0.00	0.00	0.00	5571.32
	Total	0.23	177.10	0.00	7156.54	90.04	0.00	0.00	0.00	56.82	0.00	0.00	0.00	7480.73

Data provided by the DOE reporting sites.

1995 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. Argonne National Laboratory-East	Routine	0.00	0.00	0.00	1.25	1444.46	0.00	0.00	0.00	6.16	0.00	0.00	0.00	1451.87
	Cleanup	0.00	0.00	0.00	4678.20	6036.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10714.20
	Total	0.00	0.00	0.00	4679.45	7480.46	0.00	0.00	0.00	6.16	0.00	0.00	0.00	12166.07
2. Bonneville Power Administration	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1340.06	0.00	1340.06
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2836.20	0.00	2836.20
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4176.26	0.00	4176.26
3. Pantex Plant	Routine	0.00	383.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	383.84
	Cleanup	0.00	0.00	0.00	2697.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2697.72
	Total	0.00	383.84	0.00	2697.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3081.56
4. Los Alamos National Laboratory	Routine	2.27	116.21	0.30	13.94	3.57	0.00	0.00	0.00	0.09	0.13	0.00	0.18	136.69
	Cleanup	0.00	228.11	0.08	2029.11	0.15	0.00	0.88	0.00	0.16	0.17	0.00	0.00	2258.66
	Total	2.27	344.32	0.38	2043.05	3.72	0.00	0.88	0.00	0.25	0.30	0.00	0.18	2395.35
5. Fermi National Accelerator Laboratory	Routine	0.00	0.00	0.00	0.00	48.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.10
	Cleanup	0.00	0.00	0.00	0.00	2058.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2058.00
	Total	0.00	0.00	0.00	0.00	2106.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2106.10
6. Nevada Test Site	Routine	0.00	57.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.30
	Cleanup	0.00	753.00	0.00	765.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1518.40
	Total	0.00	810.30	0.00	765.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1575.70
7. Kansas City Plant	Routine	0.00	180.23	0.00	81.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	261.67
	Cleanup	0.00	143.37	0.00	1002.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1146.33
	Total	0.00	323.60	0.00	1084.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1408.00
8. Stanford Linear Accelerator Center	Routine	0.00	0.00	0.00	0.00	170.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.91
	Cleanup	0.00	0.00	0.00	911.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	911.00
	Total	0.00	0.00	0.00	911.00	170.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1081.91
9. Lawrence Livermore National Laboratory	Routine	0.00	254.10	0.00	14.30	7.40	0.00	0.00	0.00	19.00	1.20	0.00	0.00	296.00
	Cleanup	0.00	325.20	0.00	159.50	39.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	524.20
	Total	0.00	579.30	0.00	173.80	46.90	0.00	0.00	0.00	19.00	1.20	0.00	0.00	820.20
10. Sandia National Laboratories/New Mexico	Routine	11.95	151.63	3.80	78.07	2.63	0.00	1.67	0.00	0.06	0.57	0.00	0.14	250.52
	Cleanup	0.54	7.25	0.00	215.84	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	223.95
	Total	12.49	158.88	3.80	293.91	2.63	0.00	1.67	0.00	0.06	0.90	0.00	0.14	474.51

Data provided by the DOE reporting sites.

1995 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
11. Hanford Site	Routine	0.00	0.00	0.00	285.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	285.70
	Cleanup	0.00	0.00	0.00	168.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	168.00
	Total	0.00	0.00	0.00	453.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	453.70
12. Lawrence Berkeley National Laboratory	Routine	0.00	0.01	4.68	3.73	51.59	0.00	0.65	0.00	0.00	0.00	0.00	1.13	61.79
	Cleanup	0.00	0.00	0.00	89.23	60.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	149.46
	Total	0.00	0.01	4.68	92.96	111.82	0.00	0.65	0.00	0.00	0.00	0.00	1.13	211.25
13. 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	186.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	186.00
	Total	0.00	0.00	0.00	186.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	186.00
14. Rocky Flats Environmental Technology Site	Routine	0.00	0.00	0.00	48.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.89
	Cleanup	0.00	0.00	0.00	93.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.14
	Total	0.00	0.00	0.00	142.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	142.03
15. Naval Petroleum Reserve No. 1	Routine	0.00	0.00	0.00	0.00	0.00	0.00	6.82	0.00	0.00	0.00	0.00	0.00	6.82
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	131.86	0.00	0.00	0.00	0.00	0.00	131.86
	Total	0.00	0.00	0.00	0.00	0.00	0.00	138.68	0.00	0.00	0.00	0.00	0.00	138.68
16. Brookhaven National Laboratory	Routine	0.00	0.00	0.00	0.00	103.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	103.80
	Cleanup	0.00	0.00	0.00	0.00	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.30
	Total	0.00	0.00	0.00	0.00	128.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	128.10
17. Mound Plant	Routine	0.00	0.00	0.00	113.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	113.19
	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	0.00	0.00	113.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	113.19
18. 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	107.61	0.00	107.61
	Cleanup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51	0.00	3.51
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.12	0.00	111.12
19. Sandia National Laboratories/California	Routine	0.00	29.55	0.00	2.05	9.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.05
	Cleanup	0.00	30.30	0.00	2.11	9.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.09
	Total	0.00	59.85	0.00	4.16	19.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.14
20. Oak Ridge National Laboratory	Routine	0.00	0.00	2.13	4.29	38.18	0.00	0.00	0.00	0.09	0.00	0.00	0.00	44.69
	Cleanup	0.00	0.00	1.29	1.18	19.25	0.00	0.00	0.00	0.94	0.00	0.00	0.00	22.66
	Total	0.00	0.00	3.42	5.47	57.43	0.00	0.00	0.00	1.03	0.00	0.00	0.00	67.35

Data provided by the DOE reporting sites.

1995 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
21. Savannah River Site	Routine	0.00	0.32	0.00	56.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.24
	Cleanup	0.00	0.00	0.00	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.30
	Total	0.00	0.32	0.00	62.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.54
22. Waste Isolation Pilot Plant	Routine	0.00	0.00	0.00	1.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81
	Cleanup	0.00	0.00	0.00	58.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.63
	Total	0.00	0.00	0.00	60.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.44
23. West Valley Demonstration Project	Routine	0.00	0.00	0.00	47.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.71
	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	47.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.71
24. Pacific Northwest National Laboratory	Routine	0.00	0.00	0.00	0.00	43.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.12
	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	0.00	43.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.12
25. 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	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00
	Total	0.00	0.00	0.00	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00
26. Idaho National Engineering Laboratory	Routine	0.00	0.51	0.00	24.22	0.00	0.00	0.00	0.00	3.53	0.00	0.00	0.00	28.26
	Cleanup	0.00	0.00	0.00	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71
	Total	0.00	0.51	0.00	25.93	0.00	0.00	0.00	0.00	3.53	0.00	0.00	0.00	29.97
27. Argonne National Laboratory-West	Routine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.83	0.00	0.00	0.00	22.83
	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	22.83	0.00	0.00	0.00	22.83
28. Western Environmental Technology Office	Routine	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	15.00
	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	15.00	0.00	0.00	0.00	0.00	0.00	15.00
29. Energy Technology Engineering Center	Routine	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00	3.10	0.00	0.00	0.00	4.00
	Cleanup	0.00	0.00	0.00	7.20	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	10.50
	Total	0.00	0.00	0.00	8.10	0.00	0.00	0.00	0.00	6.40	0.00	0.00	0.00	14.50
30. Inhalation Toxicology Research Institute	Routine	0.00	0.00	0.00	0.00	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57
	Cleanup	0.00	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10
	Total	0.00	0.00	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.67

Data provided by the DOE reporting sites.

1995 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
31. Pittsburgh Energy Technology Center	Routine	0.00	0.00	0.00	0.00	0.00	0.00	9.51	0.00	0.00	0.00	0.00	0.00	9.51
	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	9.51	0.00	0.00	0.00	0.00	0.00	9.51
32. Princeton Plasma Physics Laboratory	Routine	0.00	0.00	0.00	0.00	9.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.01
	Cleanup	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	Total	0.00	0.00	0.00	0.00	9.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.05
33. 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	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25
	Total	0.00	0.00	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25
34. North Las Vegas Facility	Routine	0.00	3.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72
	Cleanup	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
	Total	0.00	4.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.28
Totals for waste type	Routine	14.22	1181.18	10.91	778.42	1937.80	0.00	33.65	0.00	54.86	1.90	1447.67	1.45	5462.06
	Cleanup	0.54	1488.35	1.37	13113.48	8252.25	0.00	132.74	0.00	4.40	0.49	2839.71	0.00	25833.33
	Total	14.76	2669.53	12.28	13981.90	10190.05	0.00	166.39	0.00	59.26	2.40	4287.38	1.45	31295.39

Data provided by the DOE reporting sites.

1995 Site Waste Generation

Sanitary Waste (Metric Tons)

Reporting Site Name	Routine	Cleanup	Total
1. Idaho National Engineering Laboratory	7572.00	43075.00	50647.00
2. Oak Ridge K-25 Site	1577.00	31428.00	33005.00
3. Oak Ridge Y-12 Plant	22391.23	47.62	22438.85
4. Nevada Test Site	12960.00	0.00	12960.00
5. Lawrence Livermore National Laboratory	2041.83	6634.24	8676.07
6. Los Alamos National Laboratory	2408.54	5992.00	8400.60
7. Hanford Site	6824.07	0.00	6824.07
8. Western Area Power Administration	236.50	5452.00	5688.50
9. Kansas City Plant	5412.81	0.00	5412.81
10. Lawrence Berkeley National Laboratory	5078.78	109.19	5187.97
11. Savannah River Site	2344.90	2440.60	4785.50
12. Paducah Gaseous Diffusion Plant	3820.60	0.00	3820.60
13. Sandia National Laboratories/New Mexico	1792.60	1817.54	3610.14
14. Rocky Flats Environmental Technology Site	2502.00	0.00	2502.00
15. Fernald Environmental Management Project	2228.00	0.00	2228.00
16. Inhalation Toxicology Research Institute	324.00	1685.00	2009.00
17. Mound Plant	668.25	1282.50	1950.75
18. Argonne National Laboratory-East	1753.00	0.00	1753.00
19. Argonne National Laboratory-West	1751.00	0.00	1751.00
20. Weldon Spring Site Remedial Action Project	0.00	1596.50	1596.50
21. West Valley Demonstration Project	1389.40	179.40	1568.80
22. Waste Isolation Pilot Plant	1200.00	0.00	1200.00
23. Oak Ridge National Laboratory	1186.68	0.00	1186.68
24. Western Environmental Technology Office	1000.00	89.00	1089.00
25. Portsmouth Gaseous Diffusion Plant	0.00	784.04	784.04
26. North Las Vegas Facility	768.00	0.00	768.00
27. Brookhaven National Laboratory	694.00	0.00	694.00
28. Pantex Plant	533.00	129.11	662.11
29. Sandia National Laboratories/California	223.54	373.97	597.51
30. Naval Petroleum Reserve No. 1	586.64	0.00	586.64
31. Stanford Linear Accelerator Center	581.24	0.00	581.24
32. Fermi National Accelerator Laboratory	334.50	0.00	334.50
33. Pinellas Plant	0.00	270.00	270.00
34. Princeton Plasma Physics Laboratory	175.91	0.00	175.91
35. Pittsburgh Energy Technology Center	96.05	0.00	96.05
36. Energy Technology Engineering Center	85.00	0.00	85.00
Total Sanitary Waste	92541.07	103385.77	195926.84

Data provided by the DOE reporting sites.

1995 Site Waste Generation

Process Wastewater Waste (Cubic Meters)

Reporting Site Name	Waste Generation	Total Waste
Low-Level Radioactive Waste		3792854.28
1. Fernald Environmental Management Project	3501985.00	
2. Oak Ridge National Laboratory	273306.67	
3. Los Alamos National Laboratory	17092.72	
4. Oak Ridge Y-12 Plant	464.89	
5. Lawrence Livermore National Laboratory	5.00	
Low-Level Mixed Waste		81487.64
1. Oak Ridge K-25 Site	67986.34	
2. Oak Ridge Y-12 Plant	6920.62	
3. Hanford Site	4829.00	
4. Oak Ridge National Laboratory	1743.18	
5. Lawrence Livermore National Laboratory	8.50	
Hazardous Waste - RCRA Regulated Waste		73785.06
1. Portsmouth Gaseous Diffusion Plant	72721.76	
2. Sandia National Laboratories/California	1051.60	
3. Lawrence Livermore National Laboratory	11.70	
Hazardous Waste - State Regulated Waste		4838686.25
1. Naval Petroleum Reserve No. 1	4834346.00	
2. Lawrence Berkeley National Laboratory	4311.38	
3. Lawrence Livermore National Laboratory	24.90	
4. Sandia National Laboratories/California	3.40	
5. North Las Vegas Facility	0.57	
Sanitary Waste		697699.89
1. Kansas City Plant	240184.30	
2. Oak Ridge Y-12 Plant	226028.41	
2. Fernald Environmental Management Project	167836.00	
3. Inhalation Toxicology Research Institute	39179.00	
4. Hanford Site	12271.00	
5. Energy Technology Engineering Center	7990.00	
6. Western Environmental Technology Office	3066.18	
7. Sandia National Laboratories/California	1077.00	
8. Lawrence Livermore National Laboratory	68.00	
Total for all waste types		9484513.12

Data provided by the DOE reporting sites.

Changes to Data Reported for 1993
(in Cubic Meters*)

Waste Type	Reporting Site Name	1993 Value	Revised 1993**
Transuranic	Los Alamos National Laboratory - Routine Operations (Solid)	53.5	33.51
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	0	19.99
Mixed Transuranic	Los Alamos National Laboratory - Routine Operations (Solid)	255.3	43.24
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	0	205.1
Low-Level Radioactive	Lawrence Berkeley National Laboratory - Routine Operations (Solid)	34.38	7.18
	Los Alamos National Laboratory - Routine Operations (Solid)	2120.40	1986.91
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	576.00	584.46
Low-Level Mixed	Lawrence Berkeley National Laboratory - Routine Operations (Liquid)	36.00	0.95
	Los Alamos National Laboratory - Routine Operations (Solid)	44.80	12.26
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	0.10	11.75
RCRA Regulated	Lawrence Berkeley National Laboratory - Routine Operations	98.56	102.65
	Lawrence Berkeley National Laboratory - Cleanup/Stabilization	111.69	110.15
	Los Alamos National Laboratory - Routine Operations	83.18	68.96
	Los Alamos National Laboratory - Cleanup/Stabilization	0.87	15.01
State Regulated	Lawrence Berkeley National Laboratory - Routine Operations	148.17	49.96
	Lawrence Berkeley National Laboratory - Cleanup/Stabilization	129.49	16.48
	Los Alamos National Laboratory - Routine Operations	452.33	238.43
	Los Alamos National Laboratory - Cleanup/Stabilization	7.81	119.25
TSCA Regulated	Lawrence Berkeley National Laboratory - Cleanup/Stabilization	139.20	92.85
	Los Alamos National Laboratory - Cleanup/Stabilization	124.11	302.34
Mixed TSCA Regulated	Los Alamos National Laboratory - Cleanup/Stabilization	0.42	113.62
Sanitary	Los Alamos National Laboratory - Routine Operations	8180.00	228.54
	Los Alamos National Laboratory - Cleanup/Stabilization	0.00	6057.85

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

** Revised data for 1993 and 1994 have not been included in the data totals in Chapters 1.0 through 5.0 of this Report. The data have been included in the individual site Fact Sheets (Chapter 6.0).

Data provided by the DOE reporting sites.

Changes to Data Reported for 1994
(in Cubic Meters*)

Waste Type	Reporting Site Name	1994 Value	Revised 1994**
Transuranic	Los Alamos National Laboratory Routine Operations (Solid)	66.8	49.58
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	0	17.25
Mixed Transuranic	Los Alamos National Laboratory - Routine Operations (Solid)	17.2	12.35
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	0	4.58
Low-Level Radioactive	Lawrence Berkeley National Laboratory - Routine Operations (Liquid)	9.57	12.24
	Lawrence Berkeley National Laboratory - Cleanup/Stabilization (Solid)	15.85	19.96
	Los Alamos National Laboratory - Routine Operations (Solid)	1754.14	1760.62
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	1071.44	147.16
Low-Level Mixed	Lawrence Berkeley National Laboratory - Routine Operations (Liquid)	2.08	2.97
	Los Alamos National Laboratory - Routine Operations (Solid)	24.33	20.49
	Los Alamos National Laboratory - Cleanup/Stabilization (Solid)	51.46	50.41
RCRA Regulated	Lawrence Berkeley National Laboratory - Routine Operations	47.10	65.69
	Lawrence Berkeley National Laboratory - Cleanup/Stabilization	4.92	17.44
	Los Alamos National Laboratory - Routine Operations	32.83	45.89
	Los Alamos National Laboratory - Cleanup/Stabilization	102.83	148.78
State Regulated	Lawrence Berkeley National Laboratory - Routine Operations	42.63	53.44
	Lawrence Berkeley National Laboratory - Cleanup/Stabilization	4.34	1.46
	Los Alamos National Laboratory - Routine Operations	234.61	291.28
	Los Alamos National Laboratory - Cleanup/Stabilization	568.19	604.00
TSCA Regulated	Lawrence Berkeley National Laboratory - Routine Operations	10.28	36.59
	Los Alamos National Laboratory - Cleanup/Stabilization	169.55	170.00
Mixed TSCA Regulated	Los Alamos National Laboratory - Cleanup/Stabilization	48.10	1057.15
Sanitary	Los Alamos National Laboratory - Routine Operations	8740.00	2322.16
	Los Alamos National Laboratory - Cleanup/Stabilization	0.00	6623.06

Recycling Activity	Reporting Site Name	1994 Value	Revised 1994**
Aluminum Cans	Sandia National Laboratories/California	0.4	1000

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

** Revised data for 1993 and 1994 have not been included in the data totals in Chapters 1.0 through 5.0 of this Report. The data have been included in the individual site Fact Sheets (Chapter 6.0).

Appendix C

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.*

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 D

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